Service
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# Service Manual

**Horizontal Frequency**
**30KHz – 80KHz**

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SAFETY NOTICE

ANY PERSON ATTEMPTING TO SERVICE THIS CHASSIS MUST FAMILIARIZE HIMSELF WITH THE CHASSIS AND BE AWARE OF THE NECESSARY SAFETY PRECAUTIONS TO BE USED WHEN SERVICING ELECTRONIC EQUIPMENT CONTAINING HIGH VOLTAGES.

CAUTION: USE A SEPARATE ISOLATION TRANSFOMER FOR THIS UNIT WHEN SERVICING

# Revision List

| Revision | Date | Revision History | TPV Model |
|---|---|---|---|
| A00 | Aug.-18-08 | Initial Release | TCRMMTNFX2UQHN |
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# Important Safety Notice

Proper service and repair is important to the safe, reliable operation of all AOC Company Equipment. The service procedures recommended by AOC and described in this service manual are effective methods of performing service operations. Some of these service operations require the use of tools specially designed for the purpose. The special tools should be used when and as recommended.

It is important to note that this manual contains various CAUTIONS and NOTICES which should be carefully read in order to minimize the risk of personal injury to service personnel. The possibility exists that improper service methods may damage the equipment. It is also important to understand that these CAUTIONS and NOTICES ARE NOT EXHAUSTIVE. AOC could not possibly know, evaluate and advise the service trade of all conceivable ways in which service might be done or of the possible hazardous consequences of each way. Consequently, AOC has not undertaken any such broad evaluation. Accordingly, a servicer who uses a service procedure or tool which is not recommended by AOC must first satisfy himself thoroughly that neither his safety nor the safe operation of the equipment will be jeopardized by the service method selected.
Hereafter throughout this manual, AOC Company will be referred to as AOC.

**WARNING**

Use of substitute replacement parts, which do not have the same, specified safety characteristics may create shock, fire, or other hazards.

Under no circumstances should the original design be modified or altered without written permission from AOC. AOC assumes no liability, express or implied, arising out of any unauthorized modification of design.
Servicer assumes all liability.

FOR PRODUCTS CONTAINING LASER:
DANGER-Invisible laser radiation when open AVOID DIRECT EXPOSURE TO BEAM.
CAUTION-Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.
CAUTION -The use of optical instruments with this product will increase eye hazard.

TO ENSURE THE CONTINUED RELIABILITY OF THIS PRODUCT, USE ONLY ORIGINAL MANUFACTURER'S REPLACEMENT PARTS, WHICH ARE LISTED WITH THEIR PART NUMBERS IN THE PARTS LIST SECTION OF THIS SERVICE MANUAL.
Take care during handling the LCD module with backlight unit
-Must mount the module using mounting holes arranged in four corners.
-Do not press on the panel, edge of the frame strongly or electric shock as this will result in damage to the screen.
-Do not scratch or press on the panel with any sharp objects, such as pencil or pen as this may result in damage to the panel.
-Protect the module from the ESD as it may damage the electronic circuit (C-MOS).
-Make certain that treatment person's body is grounded through wristband.
-Do not leave the module in high temperature and in areas of high humidity for a long time.
-Avoid contact with water as it may a short circuit within the module.
-If the surface of panel becomes dirty, please wipe it off with a soft material. (Cleaning with a dirty or rough cloth may damage the panel.)

# 1. Monitor Specifications

| 내 용 | 사 양 |
|---|---|
| LCD 패널 타입 | 56cm Wide TFT Panel |
| 최대 해상도 | 1680 x 1050(dot) |
| Pixel Pitch | 0.282mm (가로) x 0.282mm (세로) |
| 시야각 | 170/160(degree) |
| 휘도 | 300cd/m² |
| 명암비 | 1,000:1(최고 10,000:1) |
| 응답속도 | 2ms |
| 입력 신호 | 아날로그, 디지털 |
| 입력 커넥터 | D-Sub, DVI-D |
| 화면 사이즈 | 473.76mm(H) x 296.1mm(V) |
| 전원 | AC110~240V, 50/60 Hz |
| 소비 전력 | 49 W |
| 모니터 크기 | 505.90 mm(W)×407.20 mm(H)×210 mm(D) |
| 제품 무게(모니터) | 4.8 kg |
| 제품 무게(포장 상태) | 5.7 kg |
| 사용 온도 | 0 ℃ ~ +50 ℃ |
| 보관 온도 | -20 ℃ ~ 60 ℃ |

## 전원 표시등/소비 전력

| 모드 | ON 모드 | 절전 모드 | OFF 모드 |
|---|---|---|---|
| LED | 녹색 | 주황색 | 꺼짐 |
| 소비 전력 | ≤ 49 W(최대) | ≤ 2 W | - |

## 2. LCD Monitor Description

The LCD MONITOR will contain a main board, a power board and a key board which house the flat panel control logic, brightness control logic and DDC.

The power board will provide AC to DC Inverter voltage to drive the backlight and the main board chips each voltage.

**Monitor Block Diagram**

CCFL Drive.

Flat Panel and
CCFL backlight

Power Board
(Contains Adapter, Inverter)

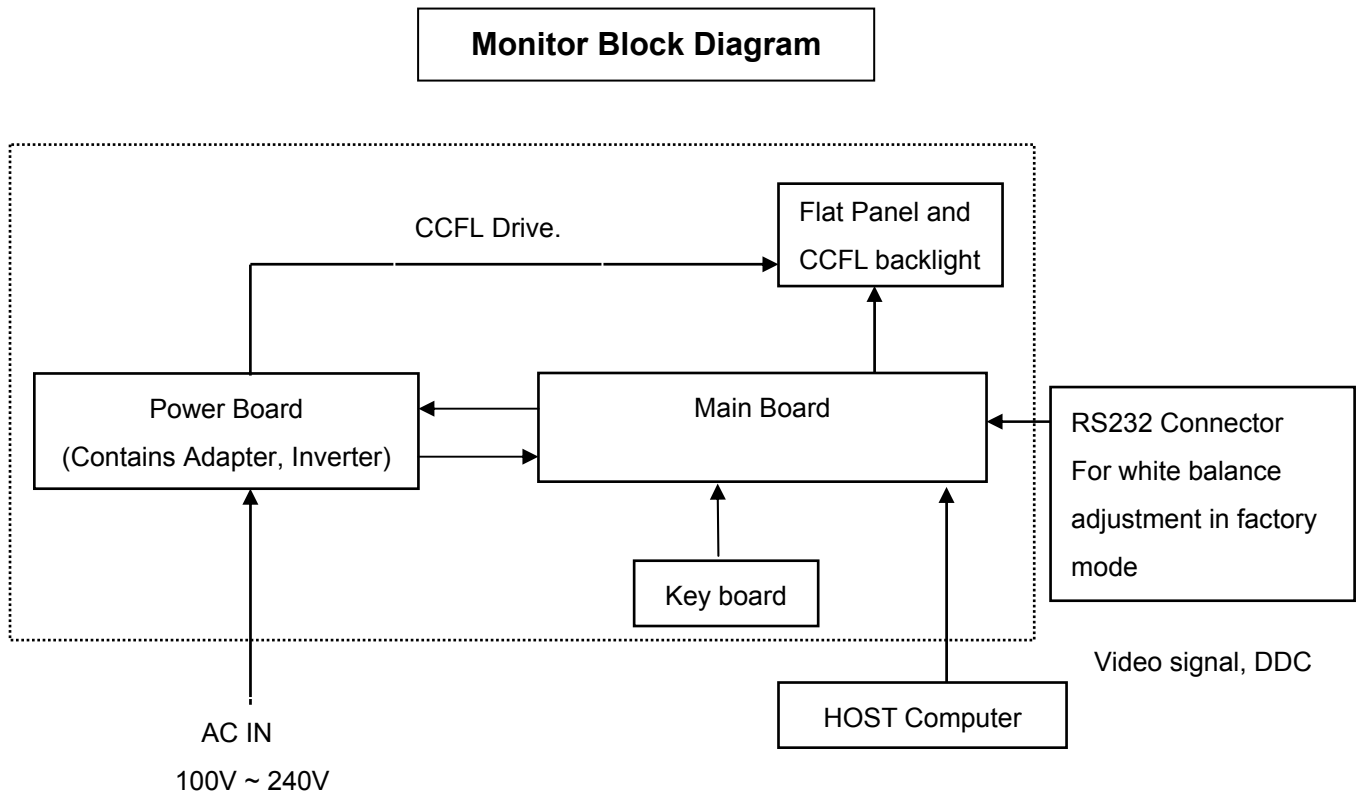
Main Board

RS232 Connector
For white balance
adjustment in factory
mode

Key board

Video signal, DDC

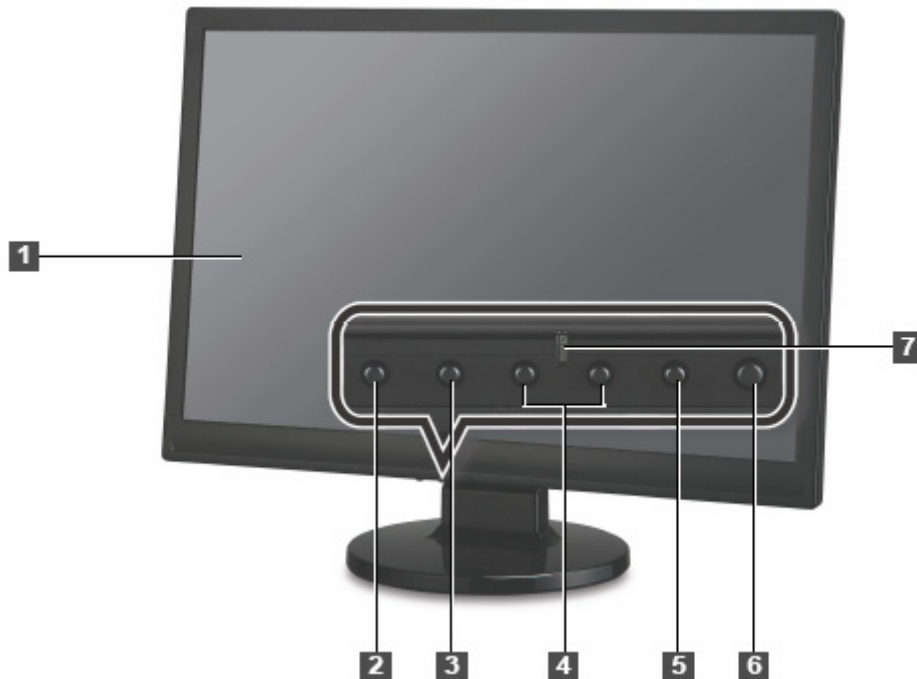
HOST Computer

AC IN
100V ~ 240V

# 3. Operating Instructions

## 3.1 General Instructions

Press the power button to turn the monitor on or off. The other control buttons are located in the bottom of the bezel. By changing these settings, the picture can be adjusted to your personal preferences.

- The power cord should be connected.
- Connect the video cable from the monitor to the video card.
- Press the power button to turn on the monitor, the power indicator will light up.

## 3.2 Control Button

**1 액정 화면(TFT LCD)**

시스템의 작동 내용을 보여 줍니다.

**2 Source(입력 신호 선택) 버튼**

입력 신호를 선택합니다.

- **Analog (아날로그)** : D-Sub 케이블을 연결하여 사용할 경우 선택하십시오.
- **Digital (디지털)** : DVI 케이블을 연결하여 사용할 경우 선택하십시오.

## 3 Auto 버튼

- OSD 메뉴 화면이 없는 상태에서 이 버튼을 누르면 '자동 조정' 메시지와 함께 자동으로 현재 모드에 맞는 최상의 화면 상태로 조정됩니다.
- 서브 메뉴에서 이 버튼을 누르면 서브 메뉴를 빠져 나옵니다.

## 4 ◀/▶ 버튼

- OSD 화면상에서 이 버튼을 누르면 다음 메뉴 항목으로 이동합니다.
선택한 메뉴 항목에서 이 버튼을 누르면 조정값이 감소/증가합니다.

## 5 Menu 버튼

- 전원 표시등에 불이 들어온 상태에서 이 버튼을 누르면 OSD(On Screen Display) 메뉴 화면이 나타납니다.
- OSD 메뉴에서 이 버튼을 누르면 변경 설정할 메뉴를 선택할 수 있습니다.
- OSD 메뉴에서 현재 선택한 설정 값을 저장할 수 있습니다.

## 6 전원 버튼

이 버튼을 누르면 전원이 켜지고 다시 누르면 전원이 꺼집니다.

## 7 전원 표시등

LCD 모니터의 전원을 켜면 표시등에 녹색 불이 켜집니다.
(LCD 모니터가 절전 모드로 들어가면 표시등이 주황색으로 바뀝니다.)

### 3.3 Adjusting the Picture

* OSD 메인 메뉴를 나타나게 하려면 〈Menu〉 버튼을 눌러 주십시오.
  (표시등에 불이 들어온 상태에서 〈Menu〉 버튼을 눌러야 OSD 메인 메뉴가 나타납니다.)

* 〈◀/▶〉 버튼을 눌러 각 메뉴로 이동한 후 〈Menu〉 버튼을 누르면 해당 서브 메뉴가 선택됩니다.

## 1 밝기/명암

LCD 화면의 밝기 및 명암을 조정할 수 있습니다.

- 명암 : 화면의 명암을 조정할 수 있습니다.
- 밝기 : 화면의 밝기를 조정할 수 있습니다.
- Eco : 표준모드, 텍스트 모드, 인터넷 모드, 게임 모드, 영화 모드, 스포츠 모드
- 감마 : 감마1, 감마2, 감마3으로 조정
- DCR : Off일 경우 DCR이 해제되고, On일 경우 DCR이 작동합니다.
  (본 기능은 동영상( 게임 또는 영화)을 즐길 경우 유익한 기능입니다.)

## 2 이미지 설정

화면 이미지의 설정값을 조정합니다.

- 미세조정(Clock) : 화면의 화소수를 증가 또는 감소시켜 미세 조정을 맞추어 화질을 조정합니다.
- 선명도 : 화면의 초점을 조정할 수 있습니다.
- 수평 위치 : 화면의 위치를 좌, 우로 조정합니다.
- 수직 위치 : 화면의 위치를 상, 하로 조정합니다.

## 3 색상 선택

색상의 설정값을 조정합니다.

- 따뜻한 색 : 색온도를 따뜻하게 설정합니다.
- 기본 색 : 색온도를 표준으로 설정합니다.
- 시원한 색 : 색온도를 차갑게 설정합니다.
- sRGB : sRGB에 적합한 색온도를 설정합니다.
- 사용자
  User-R : 붉은색 값을 변경합니다.
  User-G : 녹색 값을 변경합니다.
  User-B : 푸른색 값을 변경합니다.
  User-Y : 노란색 값을 변경합니다.
  User-C : 청록색 값을 변경합니다.
  User-M : 자홍색 값을 변경합니다.

## 4 색상 향상

이미지 환경에 맞게 색상을 조정할 수 있습니다.

- Full Enhance(생생한 모드) : 생기있는 화면 적합 모드
- Nature Skin(네이처 스킨 모드) : 인물 표현 적합 모드
- Green Field(그린 필드 모드) : 넓은 초원 등을 볼 때 적합한 모드
- Sky-blue(스카이 블루 모드) : 바다, 하늘 등의 색 표현에 적합 모드
- Auto Detect(자동 탐색 모드) : 자동 설정 모드
- Demo(데모)

## 5 화면 설정

화면 특정 부분만을 선택하여 설정 값을 조정할 수 있습니다.

- Frame Size : 프레임 사이즈 조정
- 밝기 : 프레임 밝기 조정
- 명암 : 프레임 명암 조정
- 색조 : 프레임 색상 조정
- 채도 : 프레임 채도 조정
- 위치 -수평 위치 : 프레임의 위치를 좌, 우로 조정합니다.
  -수직 위치 : 프레임의 위치를 상, 하로 조정합니다.
- Bright Frame : 밝은 프레임 설정

## 6 OSD 설정

OSD 메뉴의 수평, 수직, 시간, 언어 등의 설정을 변경할 수 있습니다

- 수평 위치 : OSD 메뉴의 수평 위치를 조정할 수 있습니다.
- 수직 위치 : OSD 메뉴의 수직 위치를 조정할 수 있습니다.
- OSD 지속 시간 : OSD 메뉴의 지속 시간을 설정할 수 있습니다.
- 언어 : OSD 메뉴의 언어를 선택할 수 있습니다.

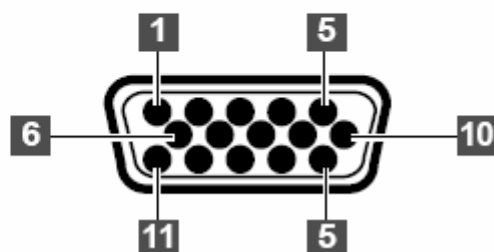
## 7 기타

- 입력 선택 : 아날로그/디지털 입력 신호를 선택합니다.
- 자동 조정 : 화면 위치/ 클럭/ 위상을 자동으로 조정하여 최적의 화면을 맞춥니다.
  ( 단, D-SUB에서만 해당됨)
- DDC/CI : DDC/CI 기능을 설정합니다.
- 화면 크기 : 화면을 확대 또는 4:3 비율로 설정합니다.
- 초기화 : 모니터 출하 시의 기본설정 값으로 변경됩니다.
- 정보 : 현재 해상도, 수평/수직 주파수, 입력 신호에 대한 정보를 알려 줍니다.

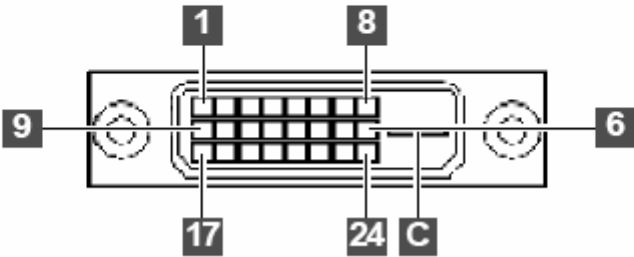
# 4.Input/Output Specification

## 4.1 Input Signal Connector

### D-SUB 입력 케이블

15핀 D-Sub 커넥터가 입력 신호 단자로 사용됩니다. 핀과 입력 신호는 아래표를 참조하십시오.

| 핀번호 | 신호 이름 |
|---|---|
| 1 | 적색 |
| 2 | 녹색 |
| 3 | 청색 |
| 4 | 접지 |
| 5 | 접지 |
| 6 | 적색 접지 |
| 7 | 녹색 접지 |
| 8 | 청색 접지 |
| 9 | +5 Vcc |
| 10 | Detect 케이블 |
| 11 | 접지 |
| 12 | DDC 시리얼 데이터 |
| 13 | 수평 동기 |
| 14 | 수직 동기 |
| 15 | DDC 시리얼 클럭 |

## DVI 입력 케이블

24 핀 DVI 커넥터가 입력 신호 단자를 사용됩니다. 핀과 입력 신호는 아래표를 참조하십시오.

| 핀 번호 | 신호 커넥터 | 핀 번호 | 신호 커넥터 |
|---|---|---|---|
| 1 | TDMS D2- | 14 | +5V POWER |
| 2 | TDMS D2+ | 15 | GND(for +5V) |
| 3 | TDMS D2/4 Shield | 16 | HPD(Hot Plug Detect) |
| 4 | N.C. | 17 | TDMS D0- |
| 5 | N.C. | 18 | TDMS D0+ |
| 6 | DDC CLK | 19 | TDMS D0/5 Shield |
| 7 | DDC DATA | 20 | N.C. |
| 8 | N.C. | 21 | N.C. |
| 9 | TDMS D1- | 22 | TDMS Clock Shield |
| 10 | TDMS D1+ | 23 | TDMS Clock+ |
| 11 | TDMS D1/3 Shield | 24 | TDMS Clock- |
| 12 | N.C. | | |
| 13 | N.C. | C | N.C. |

### 4.2 Preset operating modes

지원 가능한 모드는 아래와 같습니다.

| MODES | | | |
|---|---|---|---|
| 모드명 | 해상도 | 수평 주파수 +/−0.5 kHz | 수직 주파수 +/−1 Hz |
| DOS | 720×400@70 Hz | 31.47 kHz | 70.000 Hz |
| VGA | 640×480@60 Hz | 31.469 kHz | 59.940 Hz |
| | 640×480@75 Hz | 37.500 kHz | 75.000 Hz |
| SVGA | 800×600@60 Hz | 37.879 kHz | 60.317 Hz |
| | 800×600@75 Hz | 46.875 kHz | 75.000 Hz |
| XGA | 1024×768@60 Hz | 48.363 kHz | 60.004 Hz |
| | 1024×768@70 Hz | 56.476 kHz | 70.069 Hz |
| | 1024×768@75 Hz | 60.023 kHz | 75.029 Hz |
| | 1280×800@60 Hz | 49.800 kHz | 60.000 Hz |
| SXGA | 1280×1024@60 Hz | 63.981 kHz | 60.020 Hz |
| | 1280×1024@75 Hz | 79.976 kHz | 75.025 Hz |
| WXGA+ | 1440×900@60 Hz | 55.935 kHz | 59.8 Hz |
| WSXGA+ | 1680×1050@60 Hz | 64.674 kHz | 60.000 Hz |

### 4.3 Power Supply Features

| | |
|---|---|
| • A/C Line voltage range: | 90 V - 264 V |
| • A/C Line frequency range: | 50 Hz - 60Hz |
| • Current: | 1.5 A max. at 100V/1.5A max. at 240V |
| • Peak surge current: | < 55 A peak at 240 V AC and cold starting |
| • Leakage current: | < 1.5 mA for power from PC-outlet<br>< 3.5 mA for power from Wall-outlet |
| • Power line surge: | No adverse effects (no loss of information or defect) with a maximum of 1 half wave missing per second |
| Power factor correction | According to EN 61000-3-2 |

## 4.4 Panel Specification

### M220Z1-L03

**OVERVIEW**

The M220Z1-L03 model is a 22 inch wide TFT-LCD module with a 4-CCFL Backlight Unit and a 30-pin 2ch-LVDS interface. This module supports 1680 x 1050 WSXGA+ (16:10 wide screen) mode and displays up to 16.7 millions colors. The inverter module for the Backlight Unit is not built in.

**General Specifications**

| Item | Specification | Unit | Note |
|---|---|---|---|
| Diagonal size | 558.68 | mm | |
| Active Area | 473.76x296.1 | mm | (1) |
| Bezel Opening Area | 477.7 (H) x 300.1 (V) | mm | |
| Driver Element | a-Si TFT active matrix | - | - |
| Pixel Number | 1680 x R.G.B. x 1050 | pixel | - |
| Pixel Pitch | 0.282(H) x 0.282(V) | mm | - |
| Pixel Arrangement | RGB vertical stripe | - | - |
| Display Colors | 16.7 millions | color | - |
| Transmissive Mode | Normally White | - | - |
| Surface Treatment | Hard coating (3H), AG (Haze 25%) | - | - |

**Mechanical Specifications**

| Item | | Min. | Typ. | Max. | Unit | Note |
|---|---|---|---|---|---|---|
| Module Size | Horizontal(H) | 493.2 | 493.7 | 494.2 | mm | (1) |
| | Vertical(V) | 319.6 | 320.1 | 320.6 | mm | |
| | Depth(D) | 16 | 16.5 | 17 | mm | |
| Weight | | | | 2550 | g | |
| I/F connector mounting position | | The mounting inclination of the connector makes the screen center within ±0.5 mm as the horizontal. | | | | |

Note (1) Please refer to the attached drawings for more information of front and back outline dimensions.

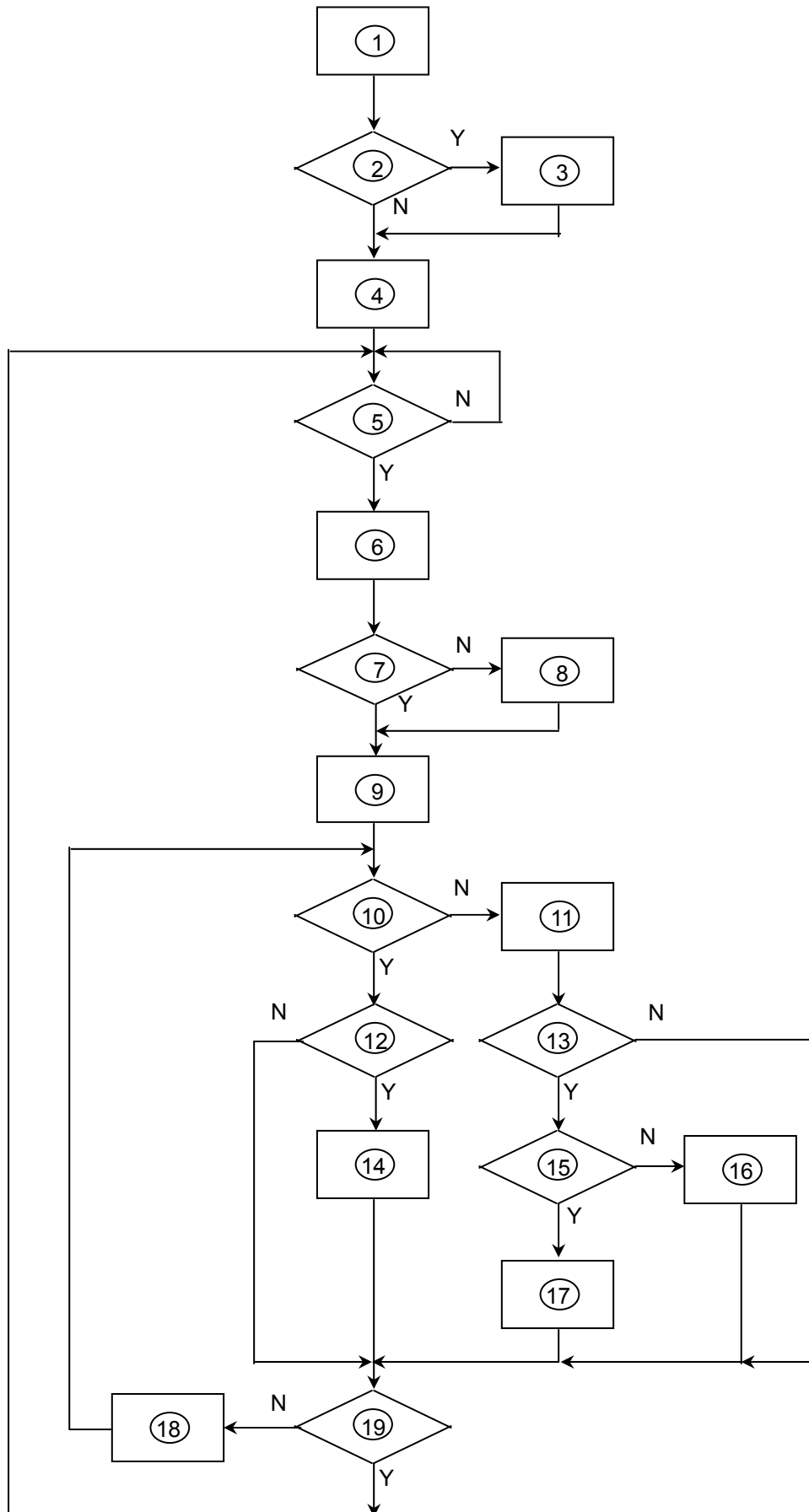
**Electrical Characteristics**

| Parameter | | Symbol | Value | | | Unit |
|---|---|---|---|---|---|---|
| | | | Min. | Typ. | Max. | |
| Power Supply Voltage | | Vcc | 4.5 | 5.0 | 5.5 | V |
| Ripple Voltage | | $V_{RP}$ | - | -- | 250 | mV |
| Rush Current | | $I_{RUSH}$ | - | -- | 3 | A |
| Power Supply Current | White | Icc | - | 630 | 819 | mA |
| | Black | | - | 1170 | 1521 | mA |
| | $f_V$ = 75Hz, Vcc=4.5V | | - | 1330 | 1729 | mA |
| LVDS differential input voltage | | Vid | 200 | - | 600 | mV |
| LVDS common input voltage | | Vic | -- | 1.2 | -- | V |

**Optical Characteristics**

| Item | | Symbol | Condition | Min. | Typ. | Max. | Unit |
|---|---|---|---|---|---|---|---|
| Color Chromaticity | Red | Rx | $\theta_x=0°$, $\theta_Y=0°$ CS-1000T R=G=B=255 Grayscale | Typ – 0.03 | 0.649 | Typ + 0.03 | |
| | | Ry | | | 0.335 | | |
| | Green | Gx | | | 0.283 | | |
| | | Gy | | | 0.605 | | |
| | Blue | Bx | | | 0.151 | | |
| | | By | | | 0.073 | | |
| | White | Wx | | | 0.313 | | |
| | | Wy | | | 0.329 | | |
| Center Luminance of White | | $L_C$ | | 250 | 300 | --- | cd/m$^2$ |
| Contrast Ratio | | CR | | 700 | 1000 | --- | - |
| Response Time | | $T_R$ | $\theta_x=0°$, $\theta_Y=0°$ | --- | 1.3 | 2.2 | ms |
| | | $T_F$ | | --- | 3.7 | 5.8 | ms |
| White Variation | | $\delta W$ | $\theta_x=0°$, $\theta_Y=0°$ | --- | 1.3 | 1.42 | - |
| Viewing Angle | Horizontal | $\theta_x+$ | CR>10 | 75 | 85 | --- | Deg. |
| | | $\theta_x-$ | | 75 | 85 | --- | |
| | Vertical | $\theta_Y+$ | | 70 | 80 | --- | |
| | | $\theta_Y-$ | | 70 | 80 | --- | |

# 5. Block Diagram

## 5.1 Software Flow Chart

**1).** MCU initialize.

**2).** Is the EEPROM blank?

**3)**. Program the EEPROM by default values.

**4).** Get the PWM value of brightness from EEPROM.

**5).** Is the power key pressed?

**6).** Clear all global flags.

**7).** Are the AUTO and SELECT keys pressed?

**8).** Enter factory mode.

**9)**. Save the power key status into EEPROM. Turn on the LED and set it to green color. Scalar initialize.

**10).** In standby mode?

**11).** Update the life time of back light.

**12).** Check the analog port, are there any signals coming?

**13).** Does the scalar send out an interrupt request?

**14)**. Wake up the scalar.

**15)**. Are there any signals coming from analog port?

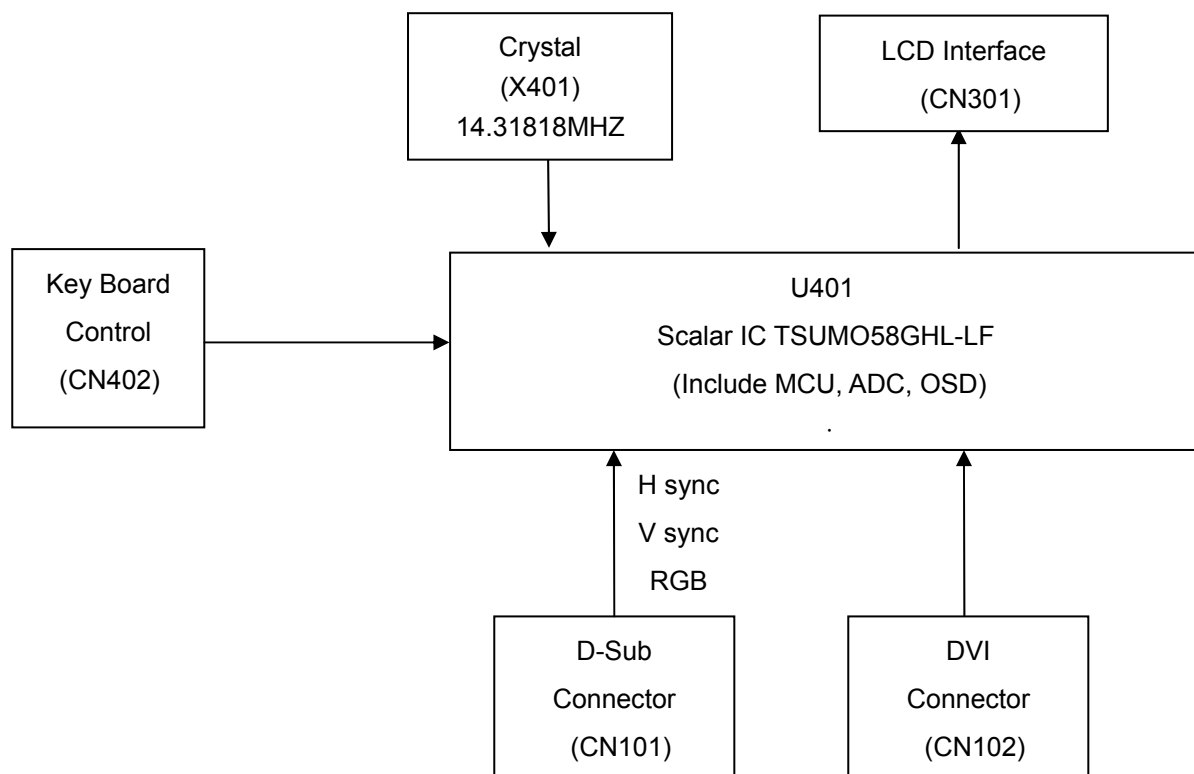
**16)**. Display "No connection Check Signal Cable" message. And go into standby mode after the message disappears.

**17)**. Program the scalar to be able to show the coming mode.

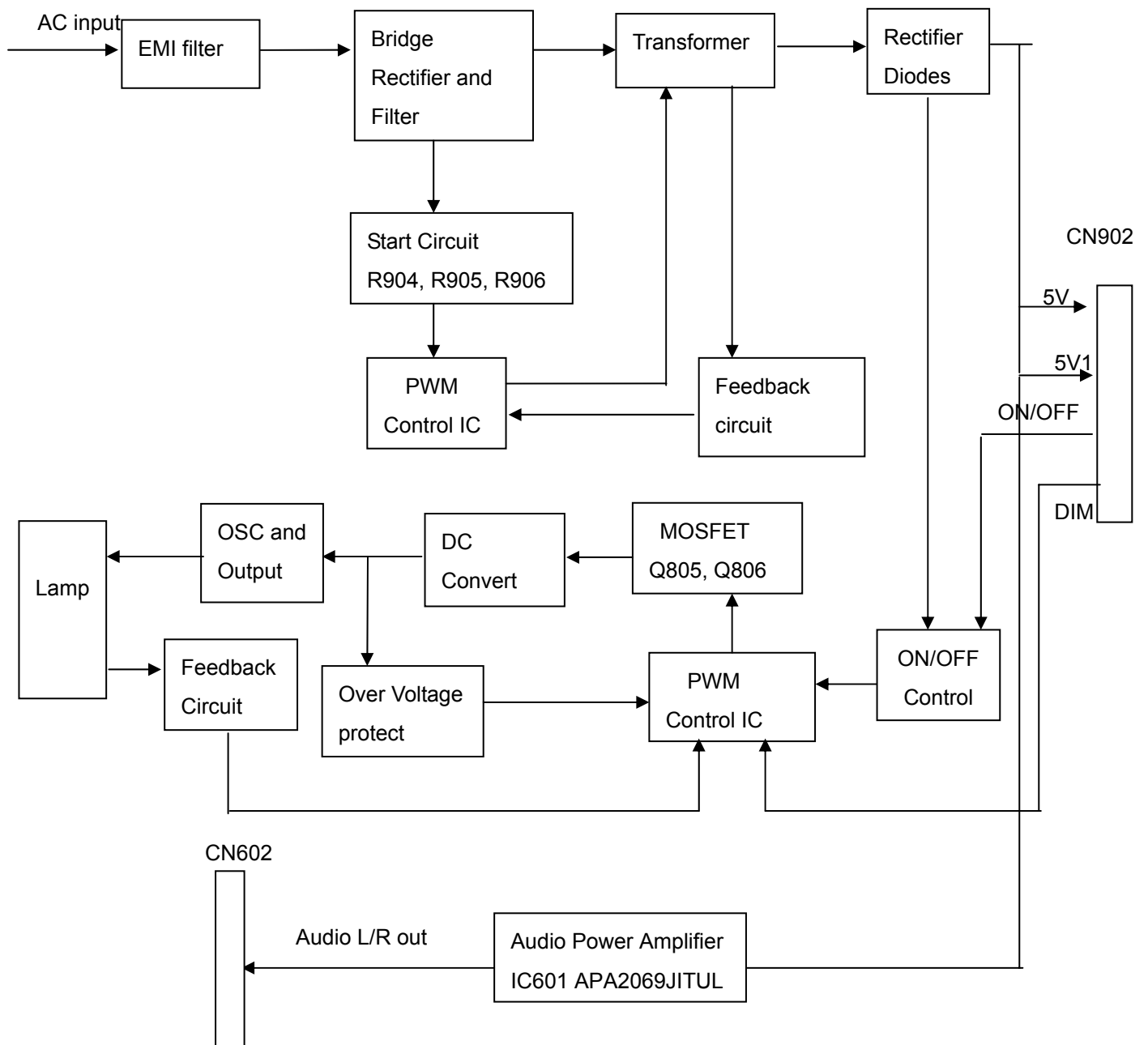
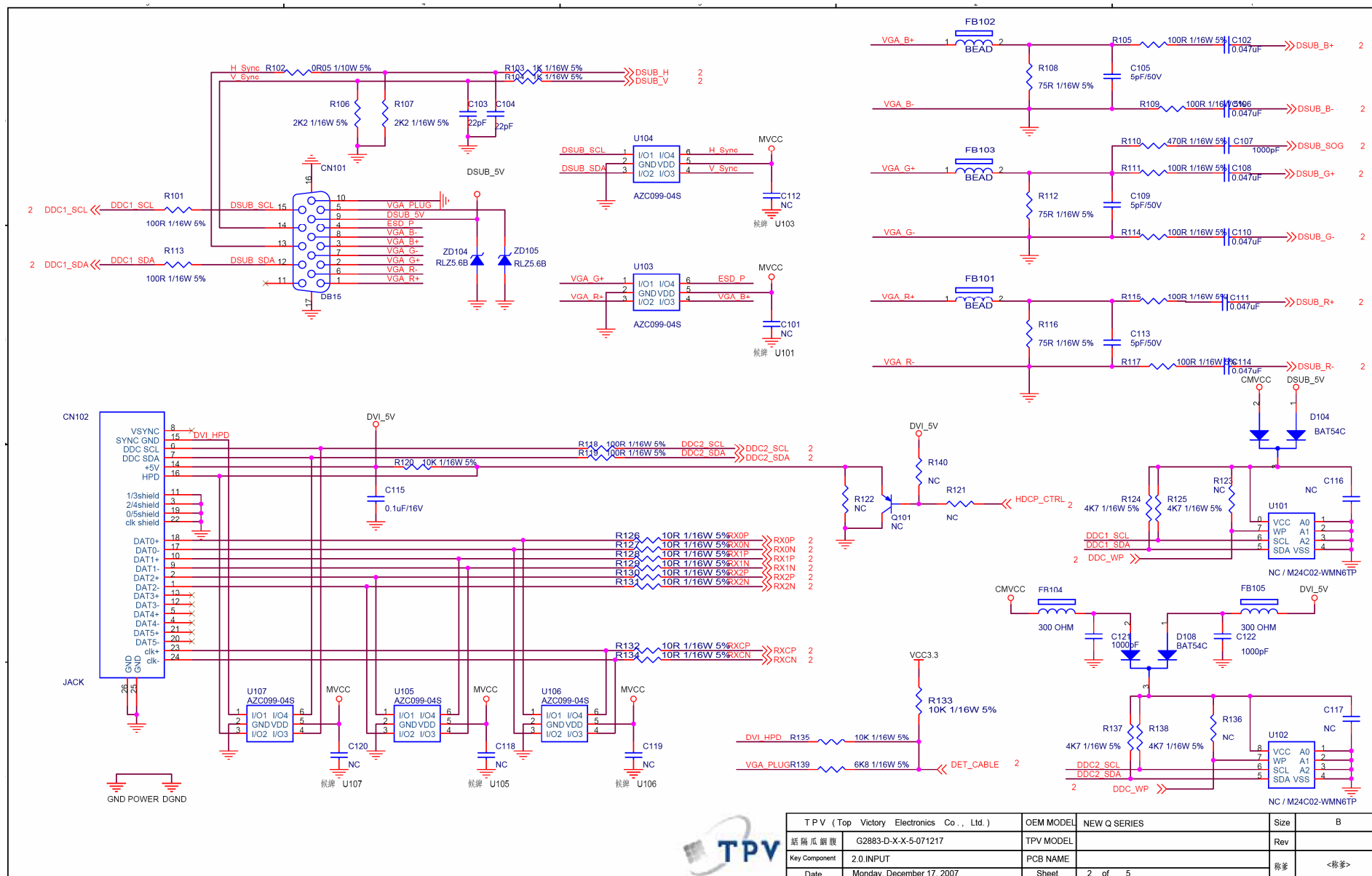
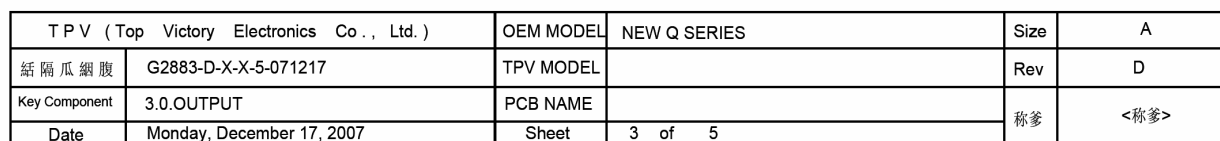
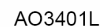
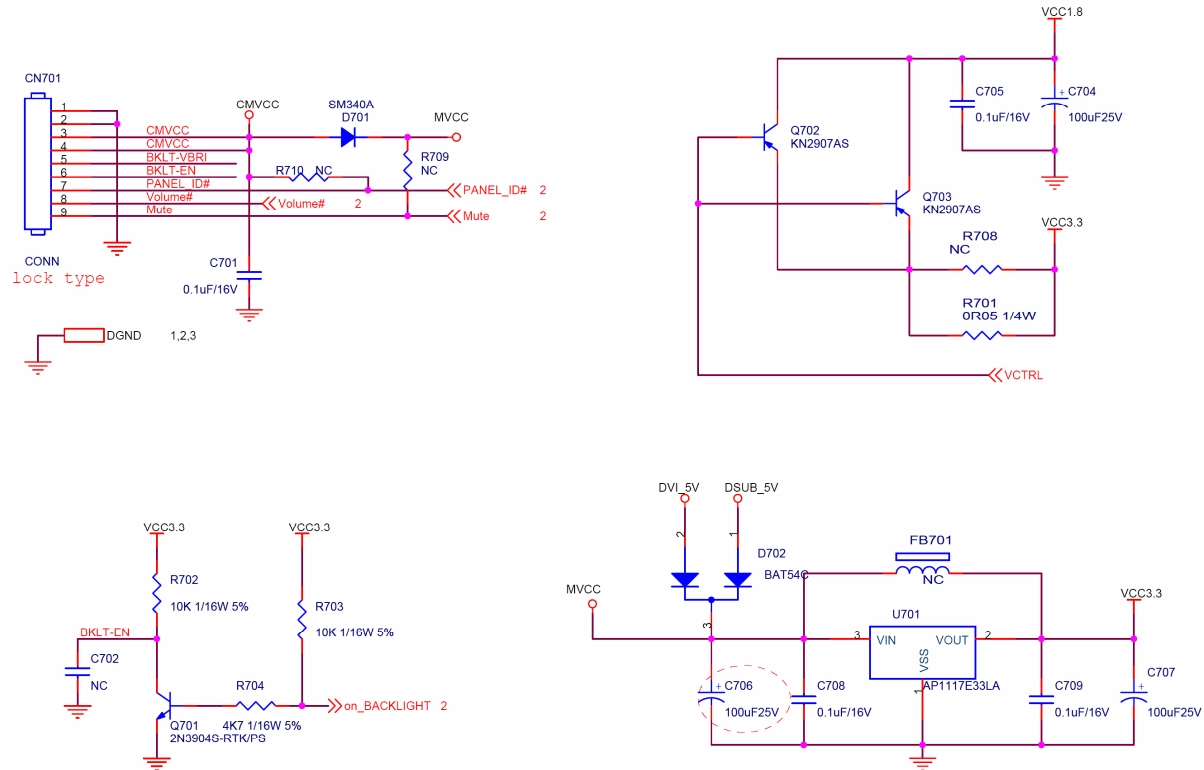
**18).** Process the OSD display.

**19).** Read the keyboard. Is the power key pressed?

## 5.2 Electrical Block Diagram

### 5.2.1 Scaler Board Block Diagram

### 5.2.2 Power Board Block Diagram

# 6. Schematic

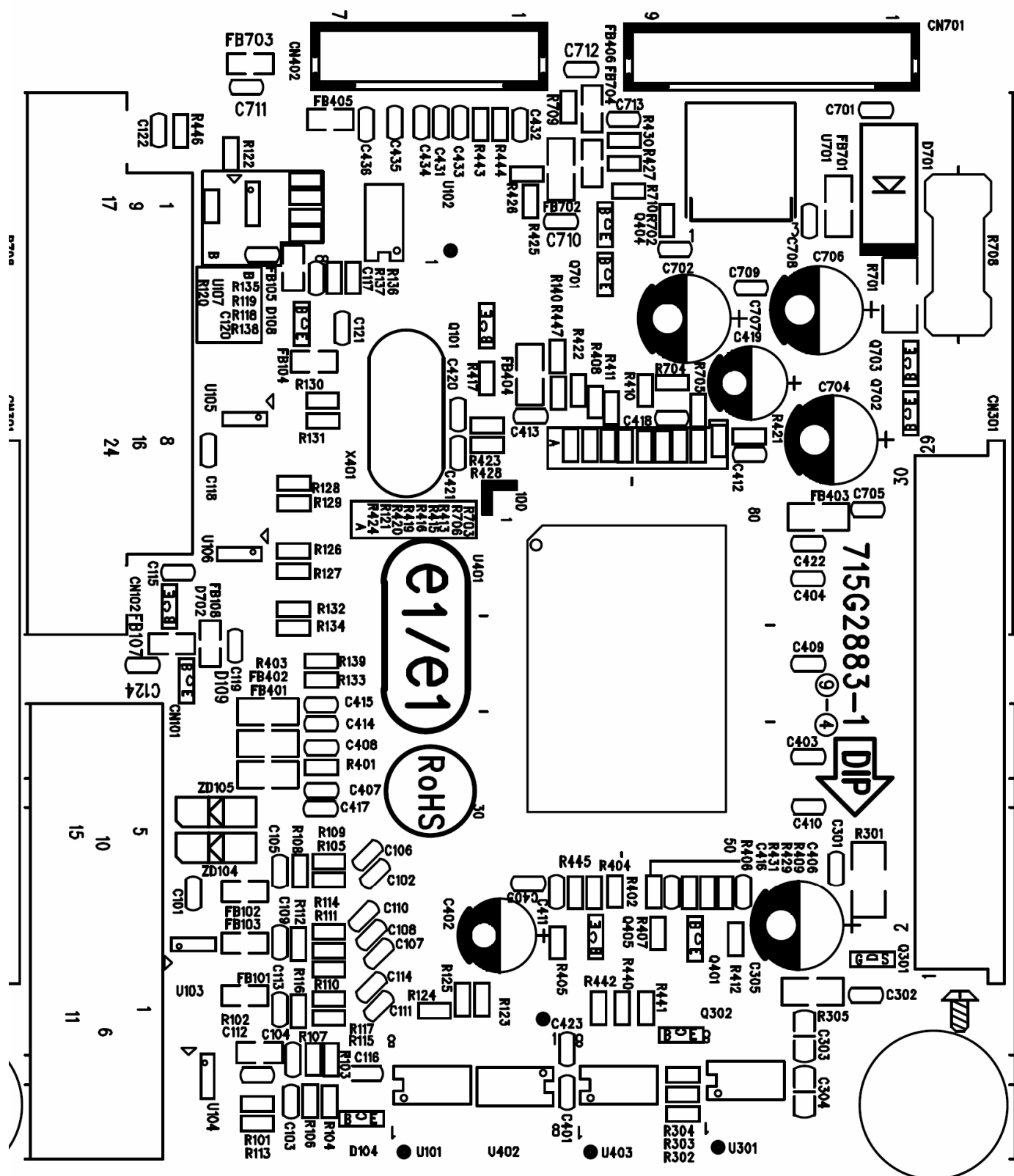
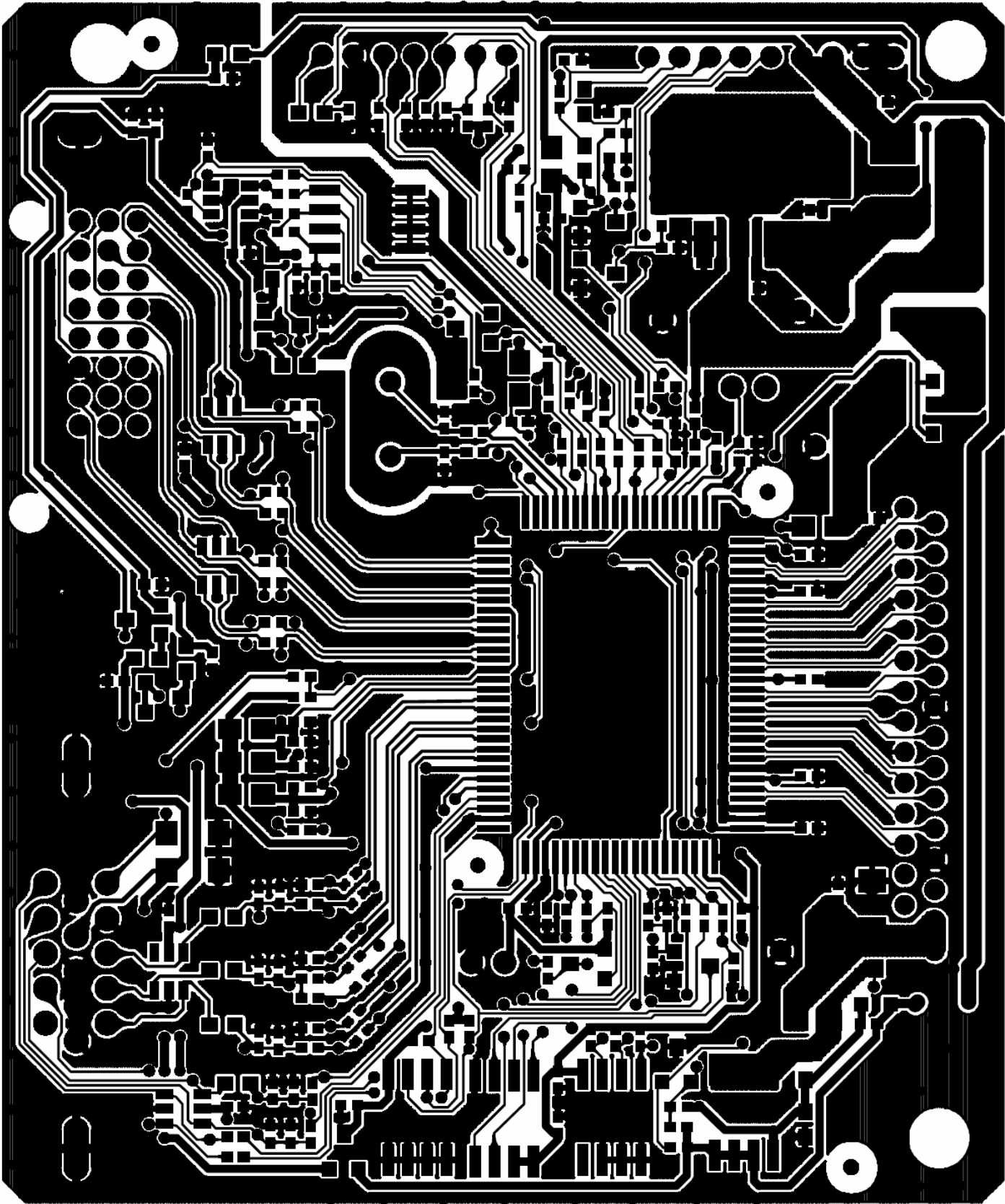
## 6.1 Main Board

| T P V ( Top Victory Electronics Co ., Ltd. ) | | OEM MODEL | NEW Q SERIES | Size | A |
|---|---|---|---|---|---|
| 紹 隔 瓜 網 腹 | G2883-D-X-X-5-071217 | TPV MODEL | | Rev | D |
| Key Component | 3.0.OUTPUT | PCB NAME | | 称爹 | <称爹> |
| Date | Monday, December 17, 2007 | Sheet | 3 of 5 | | |

| | R701 | R708 | U701 |
|---|---|---|---|
| TSUM5PFHL | 0R05 1/4W | NC | 223 |
| TSUMU58EHL | NC | 3.3 OHM 2W | 223 |
| TSUMO58CWHL | NC | 3.3 OHM 2W | 252 |
| | | | |
| | | | |

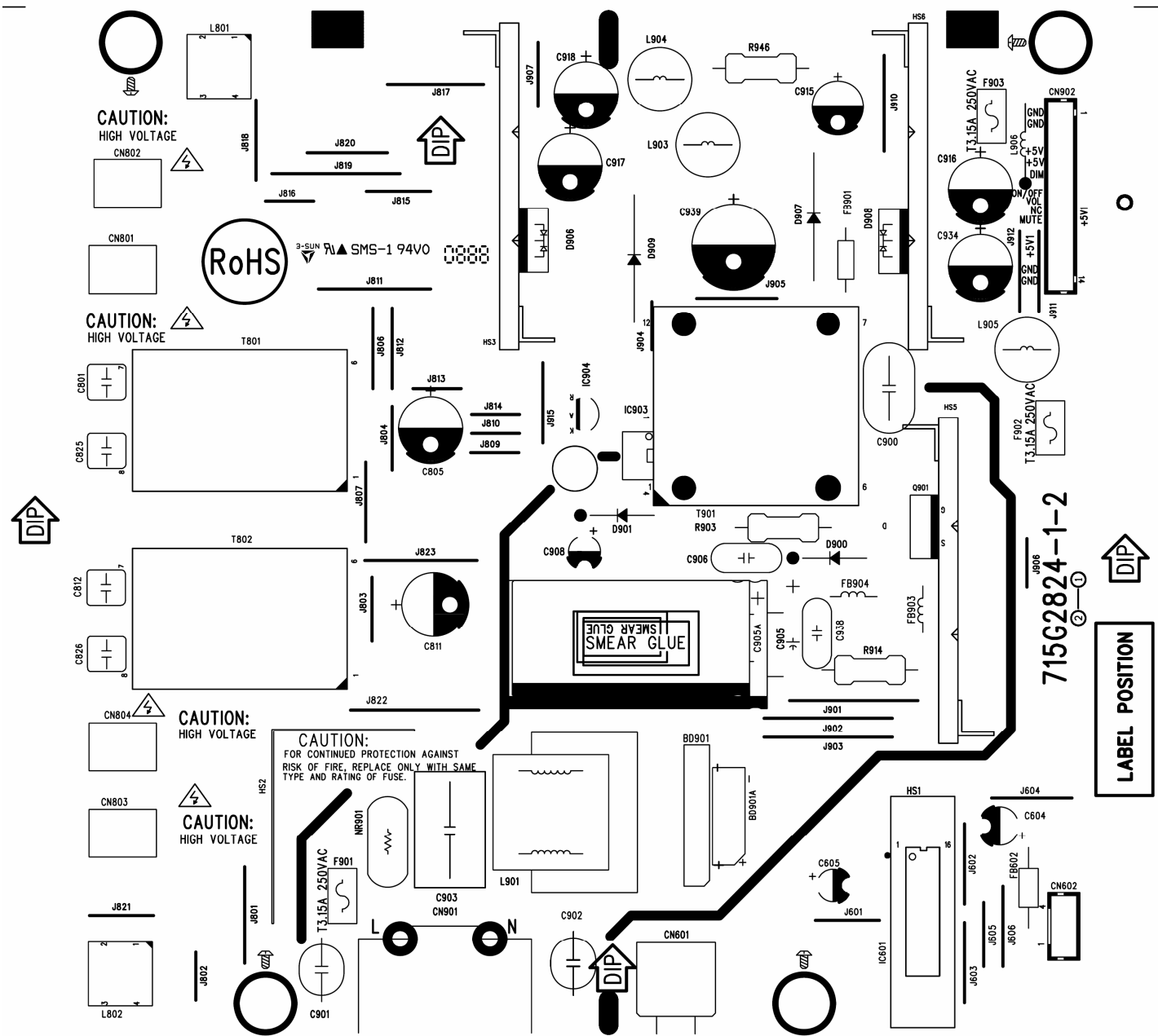
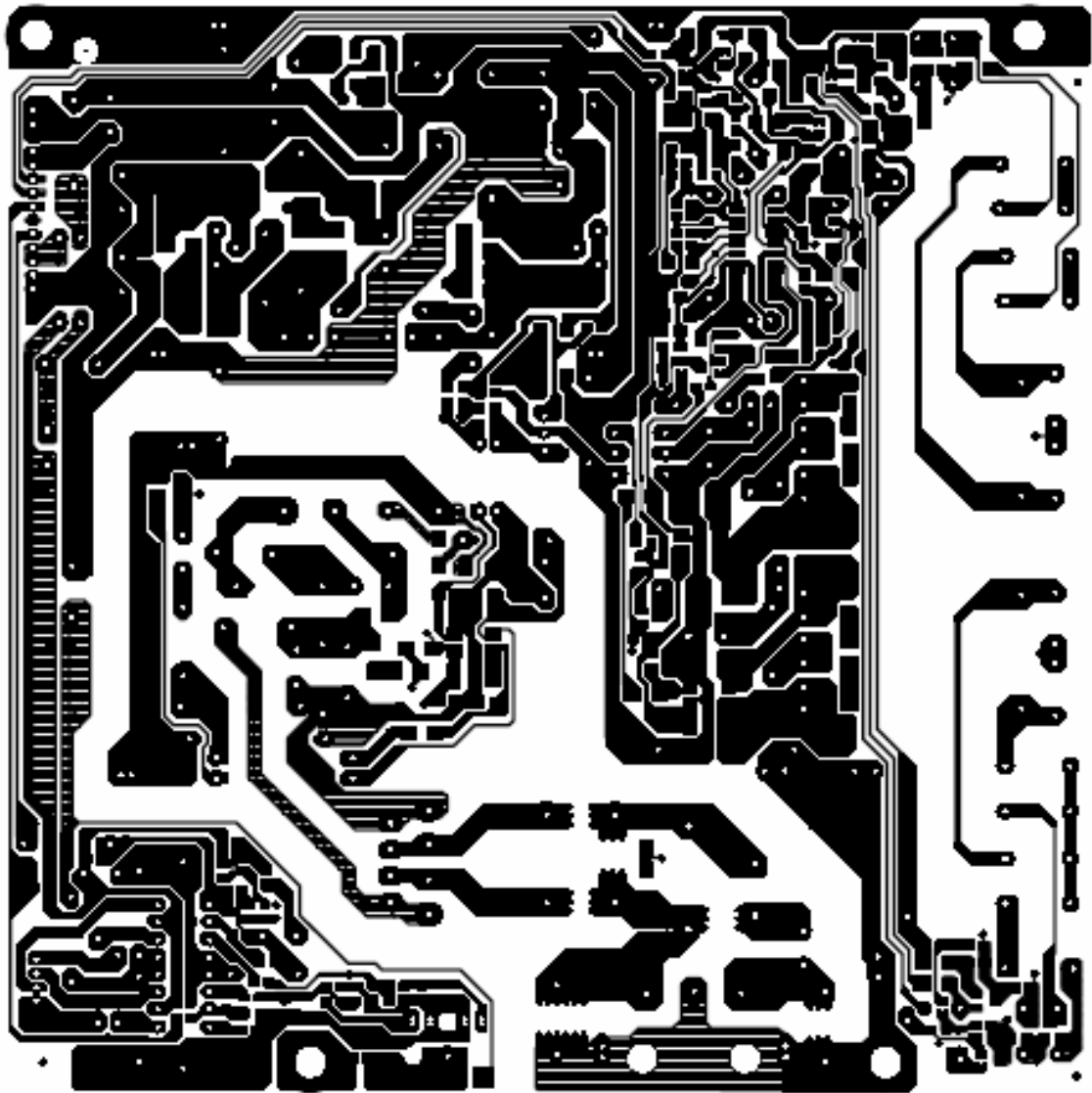
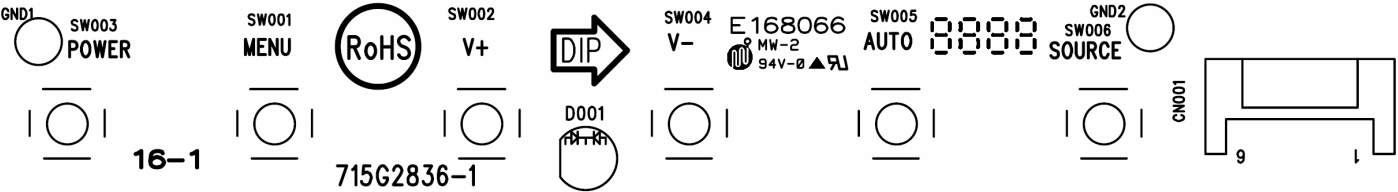
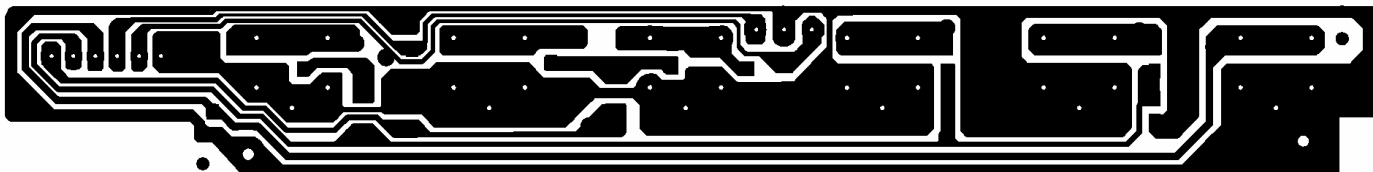
## 6.2 Power Board

+5V1
R602
10K 1/10W 5%
VOL
R603
10K 1/10W 5%
C609
1uF/25V
C604
100uF/25V
C602
0.47uF/16V
C603
0.47uF/16V
10K 1/10W 5%
R609
IC601 APA2069JITUL
SE/BTL
VOLUME
LIN-
GND
GND
RIN-
BYPASS
SHUTDOWN
LOUT-
VDD
LOUT+
GND
GND
ROUT+
VDD
ROUT-
LOUT-
LOUT+
ROUT+
ROUT-
CN602
CONN
CN601
PHONEJACK
Lin
Rin
R604
10K 1/10W 5%
R605
10K 1/10W 5%
C601 0.47uF/16V
C606 0.47uF/16V
R608
0R05 1/8W
R610 27KOHM +-5% 1/10W
R611
4.7KOHM +-5% 1/10W
C605
22uF/50V
R601 10K 1/10W 5%
C612
0.1uF/16V
C608
1uF/25V
Q607
PMBS3904
MUTE
C610
100pF
R606 6.2KOHM +-5% 1/10W
C611
100pF
R607 6.2KOHM +-5% 1/10W
R612 3.6KOHM +-5% 1/10W
Q608
RK7002
C613
0.1uF/16V
FB602
BEAD
HS1
IC with Heat-sink(90G6295-3)

# 7. PCB Layout

## 7.1 Main Board

## 7.2 Power Board

### 7.3 Key board

GND1
SW003
POWER
SW001
MENU
RoHS
SW002
V+
DIP
SW004
V−
E168066
MW-2
94V-0
SW005
AUTO
8888
GND2
SW006
SOURCE
CN001
16−1
715G2836−1
D001
9
1

# 8. Maintainability

## 8.1 Equipment and Tools Requirement

1、Voltmeter.

2.、Oscilloscope.

3、Pattern Generator.

4、DDC Tool with a Compatible Computer.

5、Alignment Tool

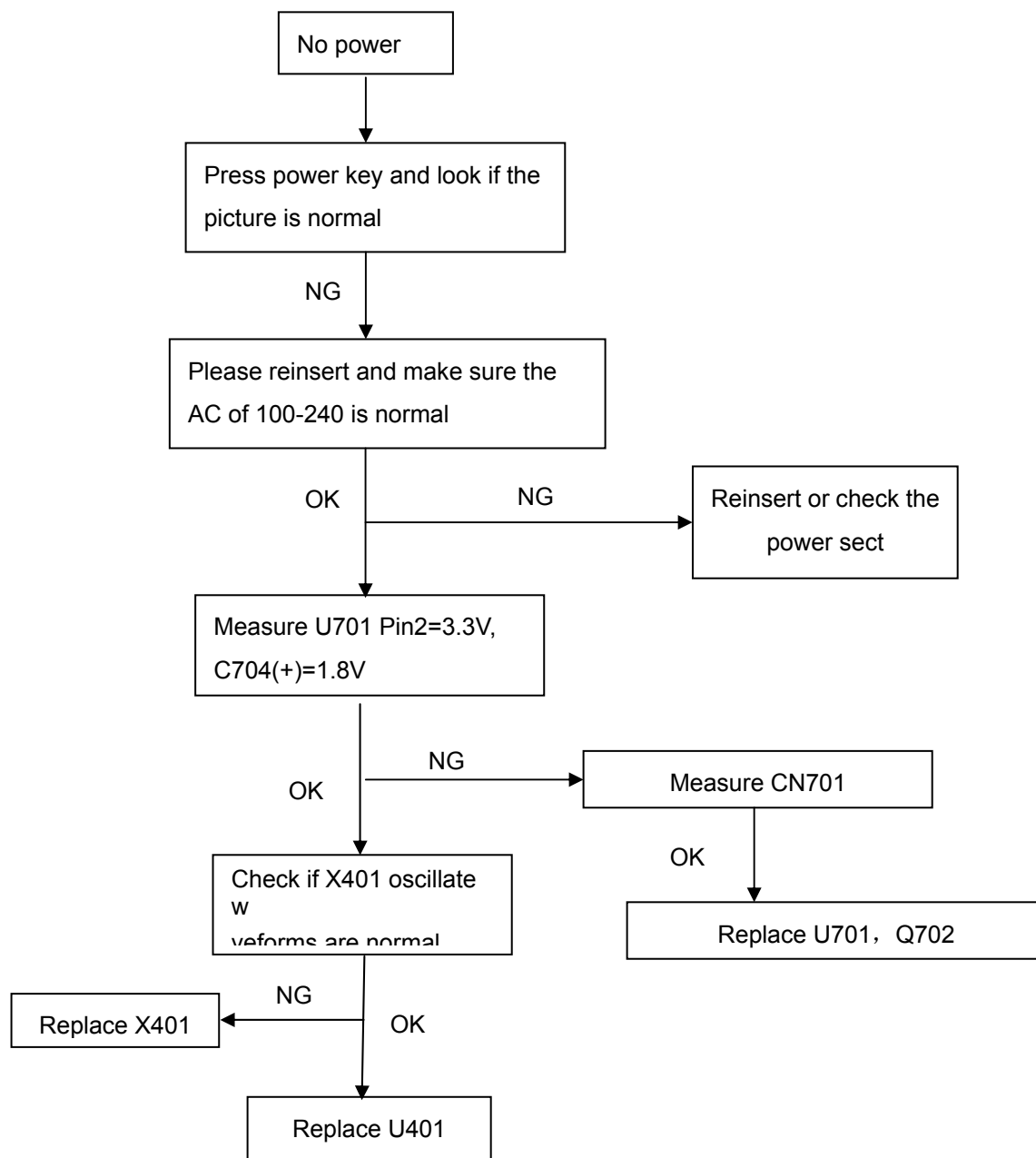
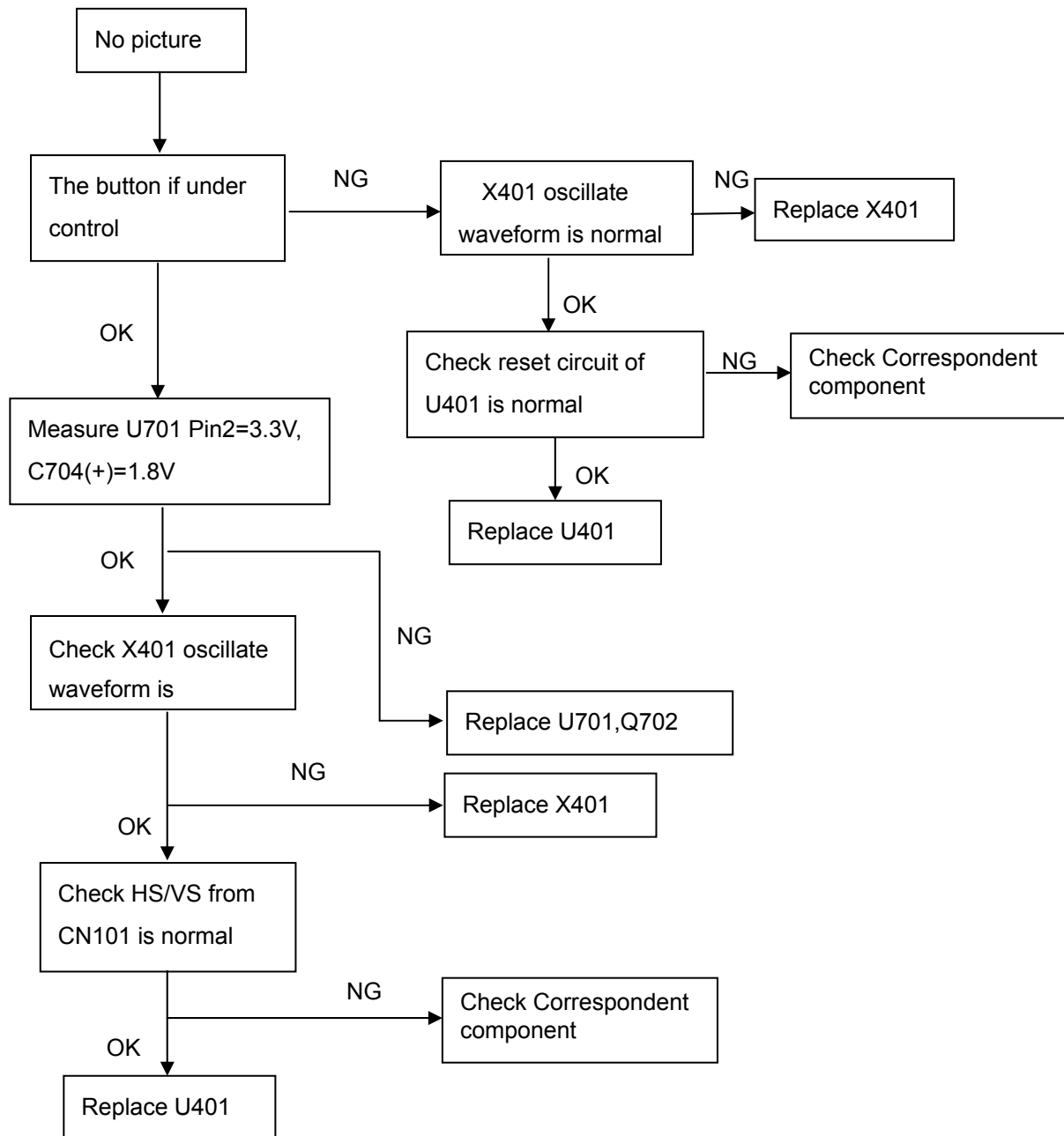
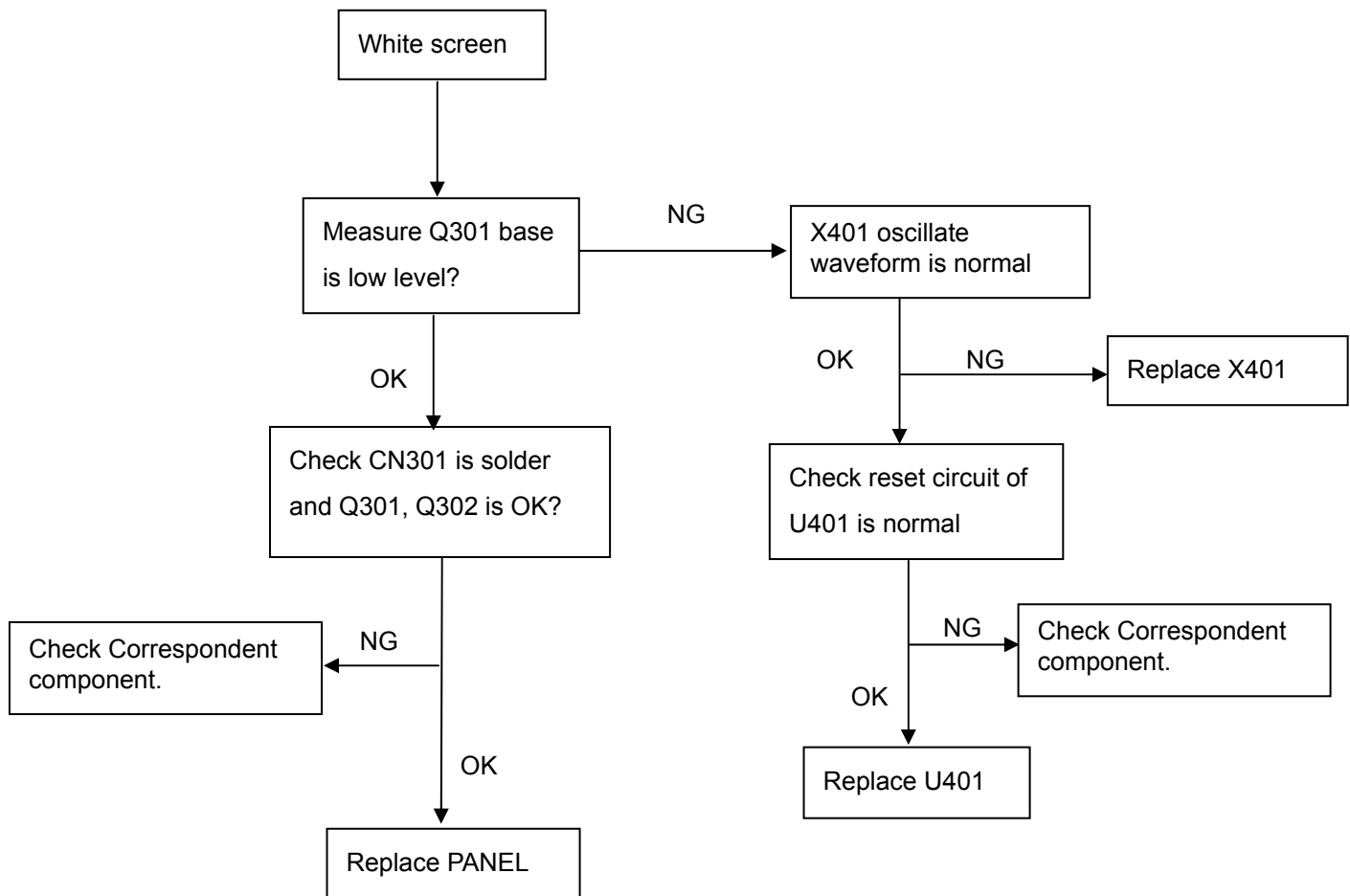
6、LCD Color Analyzer.

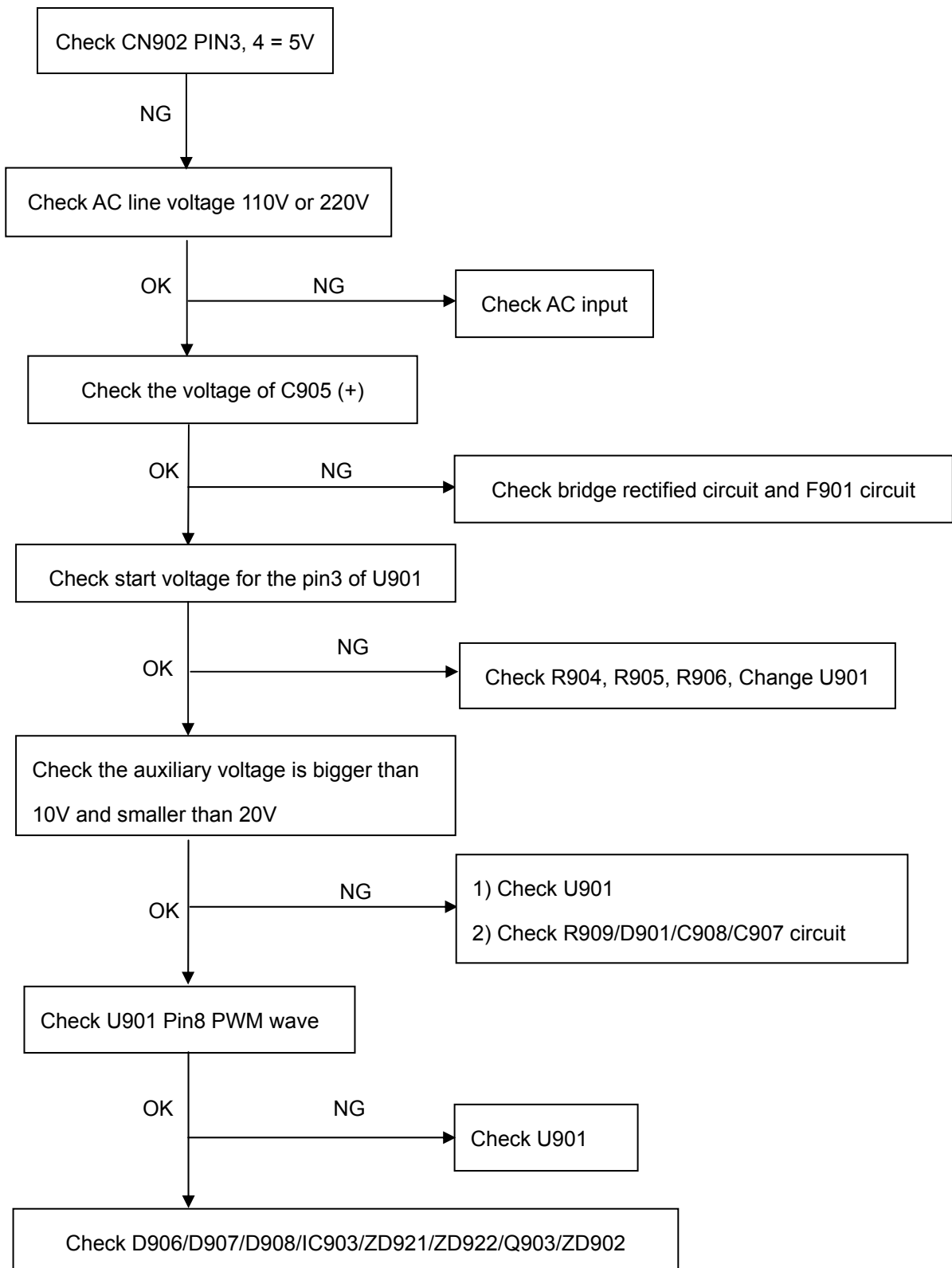
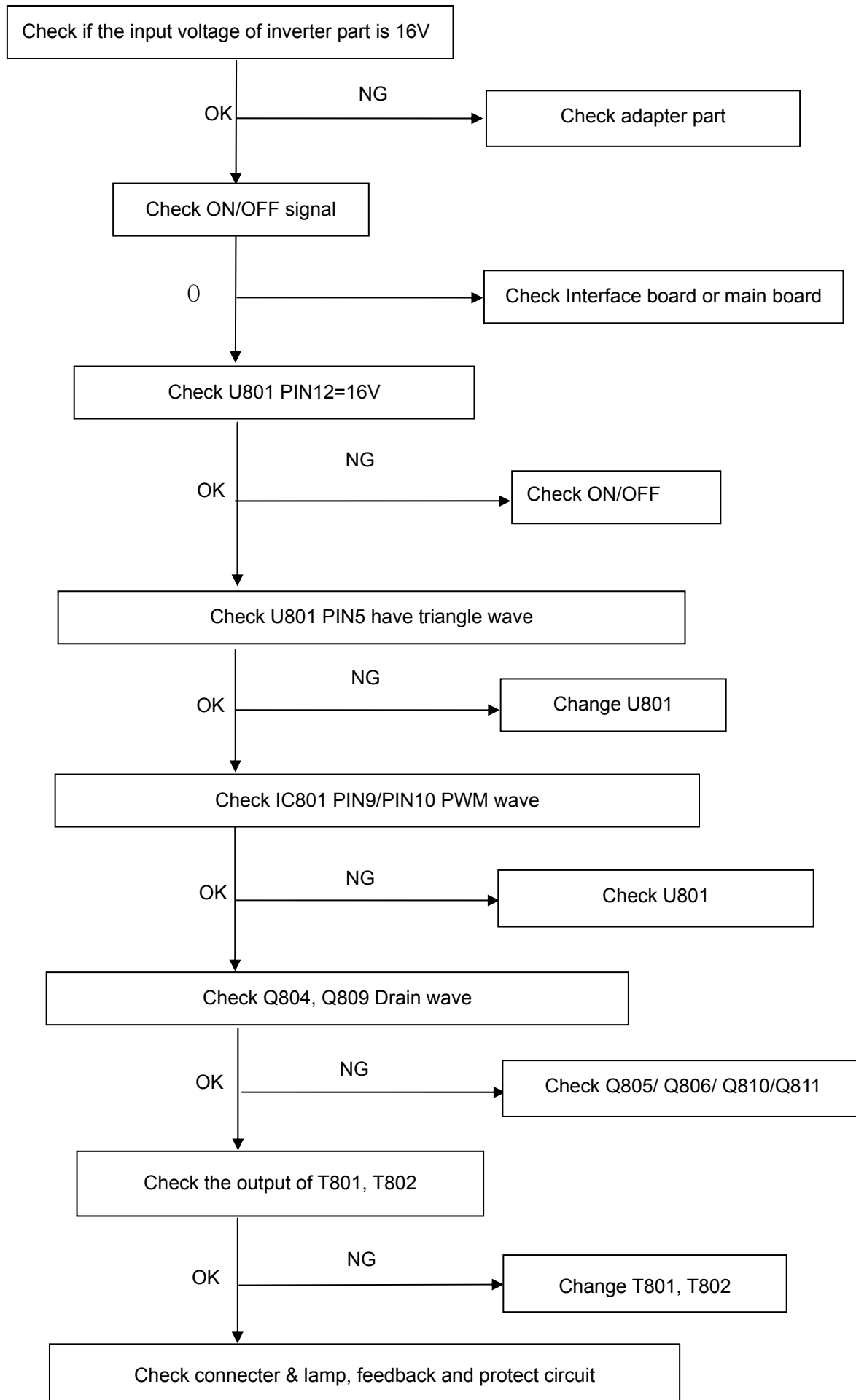
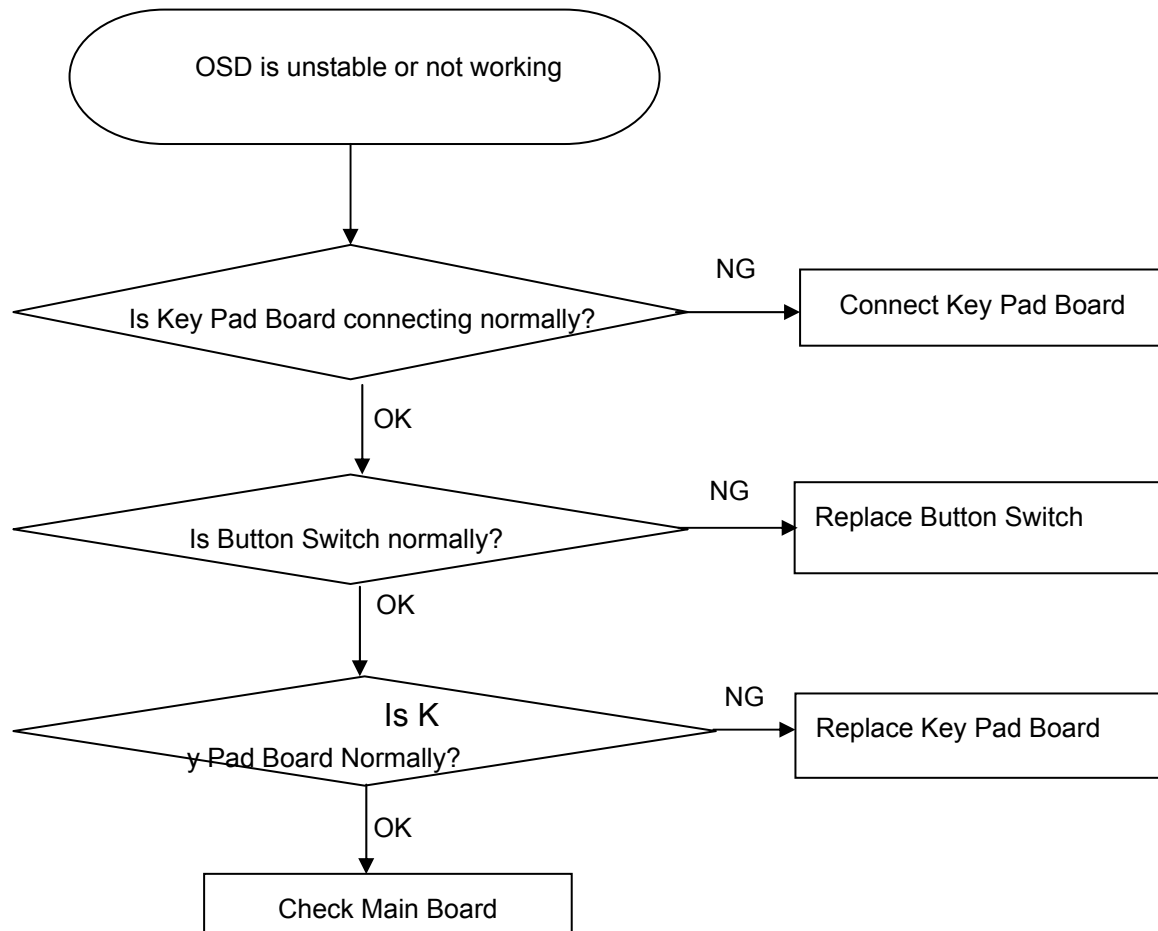
7、Service Manual.

8、User Manual

## 8.2 Trouble Shooting

### 8.2.1 Main Board

**No power**

**No picture (LED orange)**

**White screen**

### 8.2.2 Power Board

**1) No power**

**2.) No Backlight**

**8.2.3 Key Board**

# 9. White-Balance, Luminance adjustment

**Approximately 30 minutes should be allowed for warm up before proceeding White-Balance adjustment.**

1. How to do the Chroma-7120 MEM .Channel setting

A. Reference to chroma 7120 user guide

B. Use "SC" key and "NEXT" key to modify xyY value and use "**ID**" key to modify the TEXT description Following is the procedure to do white-balance adjust

2. Setting the color temp.You want

A. 9300K color:

9300k color temp. parameter is x = 283 ±25, y = 297 ±25, Y = 200 cd/$m^2$,

B. 7300K color:

6500k color temp. parameter is x = 301 ±25, y = 317 ±25, Y = 200 cd/$m^2$

C. 6500K color:

5400k color temp. parameter is x = 313 ±25, y = 329 ±25, Y = 200 cd/$m^2$

D. sRGB color:

sRGB color temp. parameter is x = 313±25, y = 329 ±25, Y =200 cd/$m^2$

3. Enter into factory mode:

Turn on power, press the Menu button, pull out the power cord, and then plug the power cord. Then the factory OSD will be at the left top of the panel.

4. Bias adjustment:

Set the **Contrast** to 90

Adjust the **Brightness** to 100.

5. Gain adjustment :

Move cursor to "-F-" and press MENU key

A. Adjust 9300K color-temperature

1. Switch the Chroma-7120 to 9300k channel.
2. The chroma 7120 will show x = 283 ±25, y = 297±25, Y = 200 cd/$m^2$
3. Switch the chroma-7120 to RGB MODE (with press "MODE" button to change)
4. Adjust the RED of color color1 on factory window until chroma 7120 indicator reached the value R=100
5. Adjust the GREEN of color color1 on factory window until chroma 7120 indicator reached the value G=100
6. Adjust the BLUE of color color1 on factory window until chroma 7120 indicator reached the value B=100
7. Repeat above procedure (item 4, 5, 6) until chroma 7120 RGB value meet the tolerance =100±2

B. Adjust 7300K color-temperature

1. Switch the chroma-7120 to 6500k channel.
2. The chroma 7120 will show x = 307 ±25, y = 317 ±25, Y = 200cd/$m^2$
3. Switch the chroma 7120 to RGB MODE (with press "MODE" button to change)
4. Adjust the RED of color color2 on factory window until chroma 7120 indicator reached the value R=100
5. Adjust the GREEN of color color2 on factory window until chroma 7120 indicator reached the value G=100
6. Adjust the BLUE of color color2 on factory window until chroma 7120 indicator reached the value B=100

7. Repeat above procedure (item 4, 5, 6) until chroma 7120 RGB value meet the tolerance =100±2

C. Adjust 6500K color-temperature

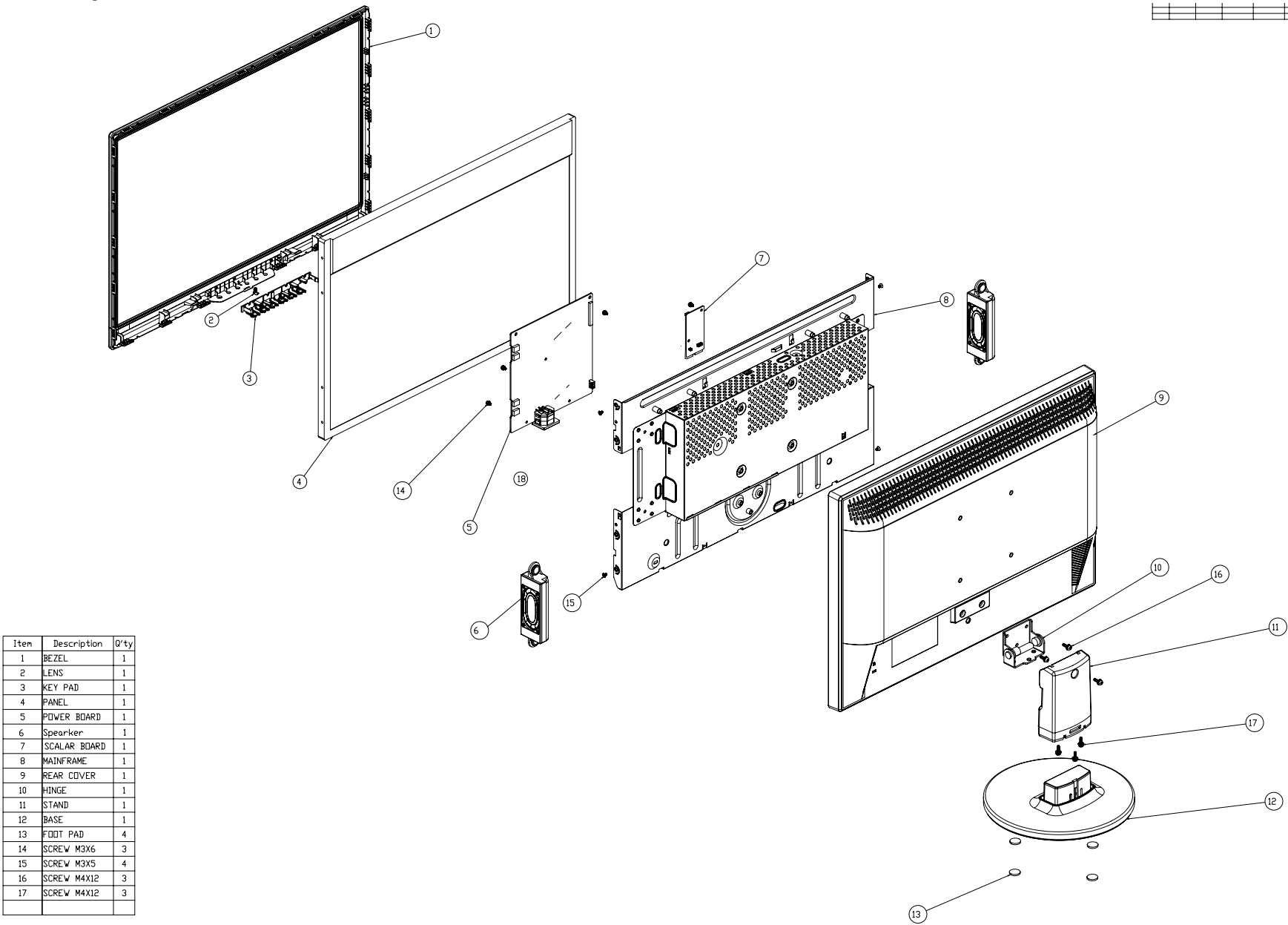
1. Switch the chroma-7120 to 5400K channel.
2. The chroma 7120 will show x = 313±25, y = 329 ±25, Y = 200 $cd/m^2$
3. Switch the chroma 7120 to RGB MODE (with press “MODE” button to change)
4. Adjust the RED of color color3 on factory window until chroma 7120 indicator reached the value R=100
5. Adjust the GREEN of color color3 on factory window until chroma 7120 indicator reached the value G=100. 6.Adjust the BLUE of color color3 on factory window until chroma 7120 indicator reached the value B=100
7. Repeat above procedure (item 4, 5, 6) until chroma 7120 RGB value meet the tolerance =100±2

D. Adjust sRGB color-temperature

1. Switch the chroma-7120 to sRGB channel.
2. The chroma 7120 will show x = 313±25, y = 329 ±25, Y =200$cd/m^2$
3. Switch the chroma 7120 to RGB MODE **(**with press “MODE” button to change)
4. Adjust the RED of color sRGB on factory window until chroma 7120 indicator reached the value R=100
5. Adjust the GREEN of color sRGB on factory window until chroma 7120 indicator reached the value G=100
6. Adjust the BLUE of color sRGB on factory window until chroma 7120 indicator reached the value B=100
7. Repeat above procedure (item 4, 5, 6) until chroma 7120 RGB value meet the tolerance =100±2

E. Press reset key and Turn the Power-button “off to on” to quit from factory mode.

# 10. Monitor Exploded View

| Item | Description | Q'ty |
|---|---|---|
| 1 | BEZEL | 1 |
| 2 | LENS | 1 |
| 3 | KEY PAD | 1 |
| 4 | PANEL | 1 |
| 5 | POWER BOARD | 1 |
| 6 | Spearker | 1 |
| 7 | SCALAR BOARD | 1 |
| 8 | MAINFRAME | 1 |
| 9 | REAR COVER | 1 |
| 10 | HINGE | 1 |
| 11 | STAND | 1 |
| 12 | BASE | 1 |
| 13 | FOOT PAD | 4 |
| 14 | SCREW M3X6 | 3 |
| 15 | SCREW M3X5 | 4 |
| 16 | SCREW M4X12 | 3 |
| 17 | SCREW M4X12 | 3 |
| | | |

## 11. BOM List

**TCRMMTNFX2UQHN**

| Location | TPV Part No. | Description | Remark |
|---|---|---|---|
| | 050G 600 1 W | WHITE STRAP | |
| | 050G 600 2 | HANDLE1 | |
| | 050G 600 3 | HANDLE2 | |
| | 052G 1150 C | INSULATING TAPE | |
| | 052G 1185 | MIDDLE TAPE | |
| | 052G 1186 | SMALL TAPE | |
| | 052G 1207 A | Conductive Tape 45mm *25mm *0.08mm | |
| | 052G 1211 B | AL TAPE | |
| | 052G6019 1 | INSULATING TAPE | |
| | 070GHDCP500HDC | HDCP CODE | |
| | 089G 725GAA DB | D-SUB CABLE | |
| | 089G1745HAA AC | DVI CABLE | |
| | 089G179J30N518 | FFC CABLE | |
| | 089G415A15N IS | POWER CORD | |
| E09502 | 095G8014 6D 50 | HARNESS 6P-6P 208mm | 2nd source |
| E09502 | 095G8014 6X 51 | HARNESS 6P-6P 216mm | |
| | 0M1G 130 5120 | SCREW | |
| | 0M1G1730 6120 | SCREW,42-D020523 | |
| | 705GQ834547 | 22" LCD STAND-BASE ASS'Y | |
| | A37G0055 1 | Hinge | |
| | AM1G1740 12 47 CR3 | SCREW | |
| | Q12G6600 6 | FOOT | |
| | Q34G0306AED 1B0100 | STAND | |
| | Q34G0307AEDA1B0133 | BASE 8S2 | |
| E750 | 750GLMC0Z1312N | PANEL M220Z1-L03 C1 NB CMO | |
| E750 | 750GLMC0Z1322N | PANEL M220Z1-L03 C1 NB CMO | 2nd source |
| | 756GQ8CB AW004 | MAIN BOARD-CBPCRMTUVQ1 | |
| SMTC-U402 | 100GTMMC000N11 | MCU ASS'Y-056G1133 81 | |
| | A15G0295901 | mainframe | |
| | A33G0313ABJ 1L0100 | key pad | |
| | A34G0530ABJA8B0100 | REAR COVER22" | |
| | A34G0659AEDD2B0130 | BEZEL(L22W-8Q5) | |
| | AM1G1740 12 47 CR3 | SCREW | |
| | 040G 45762412B | CBPC LABEL | |
| CN402 | 033G3802 6 | WAFER | |
| CN701 | 033G3802 9 | WAFER 9P RIGHT ANELE PITCH | |
| CN301 | 033G801930F CH JS | CONNECTOR | |

| | | | |
|---|---|---|---|
| R708 | 061G152M159 64 | 1.5 OHM 2W 5% MOF | |
| C419 | 067G 3151007KV | ELCAP 10UF M 50V 105℃ KINGNICHI | |
| C402 | 067G 3151007KV | ELCAP 10UF M 50V 105℃ KINGNICHI | |
| C305 | 067G 3151014KV | EC 105℃ CAP 100uF M 25V | |
| C706 | 067G 3151014KV | EC 105℃ CAP 100uF M 25V | |
| C707 | 067G 3151014KV | EC 105℃ CAP 100uF M 25V | |
| C704 | 067G 3151014KV | EC 105℃ CAP 100uF M 25V | |
| CN101 | 088G 35315F H | D-SUB 15PIN | |
| CN102 | 088G 35424F N | DVI 24PIN CONN F 附螺丝 | |
| X401 | 093G 22 53 J | 14.31818MHZ/32PF/49US | |
| U401 | 056G 562563 | IC TSUMO58GHL-LF PQFP-100 | |
| U701 | 056G 585 4A | IC AP1117E33L-13 | |
| U103 | 056G 662 13 | IC AZC099-04S SOT23-6L | |
| U104 | 056G 662 13 | IC AZC099-04S SOT23-6L | |
| U105 | 056G 662 13 | IC AZC099-04S SOT23-6L | |
| U106 | 056G 662 13 | IC AZC099-04S SOT23-6L | |
| U107 | 056G 662 13 | IC AZC099-04S SOT23-6L | |
| U403 | 056G1133 32 | IC M24C04-WMN6TP SO8 | |
| U402 | 056G1133 81 | SST25LF020A-33-4C-SAE | |
| Q701 | 057G 417 12 T | KEC 2N3904S-RTK/PS | |
| Q302 | 057G 417 13 T | KEC 2N3906S-RTK/PS | |
| Q702 | 057G 417 22 T | TRA KN2907AS -60V/-0.6A SOT-23 | |
| Q703 | 057G 417 22 T | TRA KN2907AS -60V/-0.6A SOT-23 | |
| Q301 | 057G 763 1 | A03401 SOT23 BY AOS(A1) | |
| R423 | 061G0402000 | RST CHIPR 0 OHM +-5% 1/16W | |
| R134 | 061G0402100 | RST CHIPR 10 OHM +-5% 1/16W | |
| R132 | 061G0402100 | RST CHIPR 10 OHM +-5% 1/16W | |
| R131 | 061G0402100 | RST CHIPR 10 OHM +-5% 1/16W | |
| R130 | 061G0402100 | RST CHIPR 10 OHM +-5% 1/16W | |
| R129 | 061G0402100 | RST CHIPR 10 OHM +-5% 1/16W | |
| R128 | 061G0402100 | RST CHIPR 10 OHM +-5% 1/16W | |
| R127 | 061G0402100 | RST CHIPR 10 OHM +-5% 1/16W | |
| R126 | 061G0402100 | RST CHIPR 10 OHM +-5% 1/16W | |
| R101 | 061G0402101 | RST CHIPR 100 OHM +-5% 1/16W | |
| R105 | 061G0402101 | RST CHIPR 100 OHM +-5% 1/16W | |
| R109 | 061G0402101 | RST CHIPR 100 OHM +-5% 1/16W | |
| R111 | 061G0402101 | RST CHIPR 100 OHM +-5% 1/16W | |
| R113 | 061G0402101 | RST CHIPR 100 OHM +-5% 1/16W | |
| R114 | 061G0402101 | RST CHIPR 100 OHM +-5% 1/16W | |
| R115 | 061G0402101 | RST CHIPR 100 OHM +-5% 1/16W | |

| | | | |
|---|---|---|---|
| R117 | 061G0402101 | RST CHIPR 100 OHM +-5% 1/16W | |
| R118 | 061G0402101 | RST CHIPR 100 OHM +-5% 1/16W | |
| R119 | 061G0402101 | RST CHIPR 100 OHM +-5% 1/16W | |
| R409 | 061G0402101 | RST CHIPR 100 OHM +-5% 1/16W | |
| R415 | 061G0402101 | RST CHIPR 100 OHM +-5% 1/16W | |
| R416 | 061G0402101 | RST CHIPR 100 OHM +-5% 1/16W | |
| R417 | 061G0402101 | RST CHIPR 100 OHM +-5% 1/16W | |
| R425 | 061G0402101 | RST CHIPR 100 OHM +-5% 1/16W | |
| R428 | 061G0402101 | RST CHIPR 100 OHM +-5% 1/16W | |
| R429 | 061G0402101 | RST CHIPR 100 OHM +-5% 1/16W | |
| R431 | 061G0402101 | RST CHIPR 100 OHM +-5% 1/16W | |
| R445 | 061G0402101 | RST CHIPR 100 OHM +-5% 1/16W | |
| R104 | 061G0402102 | RST CHIPR 1 KOHM +-5% 1/16W | |
| R103 | 061G0402102 | RST CHIPR 1 KOHM +-5% 1/16W | |
| R706 | 061G0402102 | RST CHIPR 1 KOHM +-5% 1/16W | |
| R702 | 061G0402103 | RST CHIPR 10 KOHM +-5% 1/16W | |
| R703 | 061G0402103 | RST CHIPR 10 KOHM +-5% 1/16W | |
| R705 | 061G0402103 | RST CHIPR 10 KOHM +-5% 1/16W | |
| R120 | 061G0402103 | RST CHIPR 10 KOHM +-5% 1/16W | |
| R133 | 061G0402103 | RST CHIPR 10 KOHM +-5% 1/16W | |
| R442 | 061G0402103 | RST CHIPR 10 KOHM +-5% 1/16W | |
| R441 | 061G0402103 | RST CHIPR 10 KOHM +-5% 1/16W | |
| R135 | 061G0402103 | RST CHIPR 10 KOHM +-5% 1/16W | |
| R303 | 061G0402103 | RST CHIPR 10 KOHM +-5% 1/16W | |
| R408 | 061G0402103 | RST CHIPR 10 KOHM +-5% 1/16W | |
| R426 | 061G0402103 | RST CHIPR 10 KOHM +-5% 1/16W | |
| R440 | 061G0402103 | RST CHIPR 10 KOHM +-5% 1/16W | |
| R413 | 061G0402103 | RST CHIPR 10 KOHM +-5% 1/16W | |
| R412 | 061G0402103 | RST CHIPR 10 KOHM +-5% 1/16W | |
| R411 | 061G0402103 | RST CHIPR 10 KOHM +-5% 1/16W | |
| R421 | 061G0402104 | RST CHIPR 100 KOHM +-5% 1/16W | |
| R419 | 061G0402121 | RST CHIP 120R 1/16W 5% | |
| R420 | 061G0402121 | RST CHIP 120R 1/16W 5% | |
| R106 | 061G0402222 | RST CHIPR 2.2 KOHM +-5% 1/16W | |
| R107 | 061G0402222 | RST CHIPR 2.2 KOHM +-5% 1/16W | |
| R401 | 061G0402390 0F | RST CHIP 390R 1/16W 1% | |
| R443 | 061G0402390 1F | RST CHIPR 3.9KOHM +-1% 1/16W | |
| R444 | 061G0402390 1F | RST CHIPR 3.9KOHM +-1% 1/16W | |
| R110 | 061G0402471 | RST CHIPR 470 OHM +-5% 1/16W | |
| R704 | 061G0402472 | RST CHIPR 4.7 KOHM +-5% 1/16W | |

| | | | |
|---|---|---|---|
| R302 | 061G0402472 | RST CHIPR 4.7 KOHM +-5% 1/16W | |
| R138 | 061G0402472 | RST CHIPR 4.7 KOHM +-5% 1/16W | |
| R137 | 061G0402472 | RST CHIPR 4.7 KOHM +-5% 1/16W | |
| R125 | 061G0402472 | RST CHIPR 4.7 KOHM +-5% 1/16W | |
| R124 | 061G0402472 | RST CHIPR 4.7 KOHM +-5% 1/16W | |
| R304 | 061G0402473 | RST CHIPR 47 KOHM +-5% 1/16W | |
| R139 | 061G0402682 | RST CHIP 6K8 1/16W 5% | |
| R410 | 061G0402682 | RST CHIP 6K8 1/16W 5% | |
| R108 | 061G0402750 | RST CHIPR 75 OHM +-5% 1/16W | |
| R112 | 061G0402750 | RST CHIPR 75 OHM +-5% 1/16W | |
| R116 | 061G0402750 | RST CHIPR 75 OHM +-5% 1/16W | |
| R102 | 061G0603000 | RST CHIPR 0 OHM +-5% 1/10W | |
| FB403 | 061G0805000 F | RST CHIPR 0 OHM +-5% 1/8W FENGHUA | |
| R305 | 061G0805000 F | RST CHIPR 0 OHM +-5% 1/8W FENGHUA | |
| R403 | 061G0805000 F | RST CHIPR 0 OHM +-5% 1/8W FENGHUA | |
| R301 | 061G1206331 | RST CHIPR 330 OHM +-5% 1/4W | |
| C107 | 065G0402102 32 | 1000PF +-10% 50V X7R | |
| C121 | 065G0402102 32 | 1000PF +-10% 50V X7R | |
| C122 | 065G0402102 32 | 1000PF +-10% 50V X7R | |
| C124 | 065G0402104 12 | CAP CHIP 0402 0.1UF 16V X7R | |
| C710 | 065G0402104 12 | CAP CHIP 0402 0.1UF 16V X7R | |
| C711 | 065G0402104 12 | CAP CHIP 0402 0.1UF 16V X7R | |
| C406 | 065G0402104 15 | MLCC 0402 0.1UF K 16V X5R | |
| C405 | 065G0402104 15 | MLCC 0402 0.1UF K 16V X5R | |
| C404 | 065G0402104 15 | MLCC 0402 0.1UF K 16V X5R | |
| C709 | 065G0402104 15 | MLCC 0402 0.1UF K 16V X5R | |
| C432 | 065G0402104 15 | MLCC 0402 0.1UF K 16V X5R | |
| C431 | 065G0402104 15 | MLCC 0402 0.1UF K 16V X5R | |
| C422 | 065G0402104 15 | MLCC 0402 0.1UF K 16V X5R | |
| C418 | 065G0402104 15 | MLCC 0402 0.1UF K 16V X5R | |
| C417 | 065G0402104 15 | MLCC 0402 0.1UF K 16V X5R | |
| C415 | 065G0402104 15 | MLCC 0402 0.1UF K 16V X5R | |
| C414 | 065G0402104 15 | MLCC 0402 0.1UF K 16V X5R | |
| C413 | 065G0402104 15 | MLCC 0402 0.1UF K 16V X5R | |
| C412 | 065G0402104 15 | MLCC 0402 0.1UF K 16V X5R | |
| C411 | 065G0402104 15 | MLCC 0402 0.1UF K 16V X5R | |
| C410 | 065G0402104 15 | MLCC 0402 0.1UF K 16V X5R | |
| C409 | 065G0402104 15 | MLCC 0402 0.1UF K 16V X5R | |
| C408 | 065G0402104 15 | MLCC 0402 0.1UF K 16V X5R | |
| C407 | 065G0402104 15 | MLCC 0402 0.1UF K 16V X5R | |

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|---|---|---|---|
| C433 | 065G0402104 15 | MLCC 0402 0.1UF K 16V X5R | |
| C434 | 065G0402104 15 | MLCC 0402 0.1UF K 16V X5R | |
| C435 | 065G0402104 15 | MLCC 0402 0.1UF K 16V X5R | |
| C701 | 065G0402104 15 | MLCC 0402 0.1UF K 16V X5R | |
| C705 | 065G0402104 15 | MLCC 0402 0.1UF K 16V X5R | |
| C708 | 065G0402104 15 | MLCC 0402 0.1UF K 16V X5R | |
| C403 | 065G0402104 15 | MLCC 0402 0.1UF K 16V X5R | |
| C302 | 065G0402104 15 | MLCC 0402 0.1UF K 16V X5R | |
| C301 | 065G0402104 15 | MLCC 0402 0.1UF K 16V X5R | |
| C115 | 065G0402104 15 | MLCC 0402 0.1UF K 16V X5R | |
| C104 | 065G0402220 31 | CHIP 22PF 50V NPO | |
| C103 | 065G0402220 31 | CHIP 22PF 50V NPO | |
| C423 | 065G0402224 17 | CAP CER 0.22UF -20%-80% | |
| C401 | 065G0402224 17 | CAP CER 0.22UF -20%-80% | |
| C421 | 065G0402470 31 | MLCC 0402 CAP 47PF J 50V NPO | |
| C420 | 065G0402470 31 | MLCC 0402 CAP 47PF J 50V NPO | |
| C114 | 065G0402473 12 | CHIP 0.047uF 16V X7R | |
| C111 | 065G0402473 12 | CHIP 0.047uF 16V X7R | |
| C110 | 065G0402473 12 | CHIP 0.047uF 16V X7R | |
| C108 | 065G0402473 12 | CHIP 0.047uF 16V X7R | |
| C106 | 065G0402473 12 | CHIP 0.047uF 16V X7R | |
| C102 | 065G0402473 12 | CHIP 0.047uF 16V X7R | |
| C113 | 065G0402509 31 | CHIP 5pF 50V NPO | |
| C109 | 065G0402509 31 | CHIP 5pF 50V NPO | |
| C105 | 065G0402509 31 | CHIP 5pF 50V NPO | |
| FB702 | 071G 56G301 EA | BEAD 300 欧 | |
| FB401 | 071G 56V301 B | CHIP BEAD FCM2012VF-301T07 bullwill | |
| FB402 | 071G 56V301 B | CHIP BEAD FCM2012VF-301T07 bullwill | |
| FB404 | 071G 56V301 B | CHIP BEAD FCM2012VF-301T07 bullwill | |
| FB104 | 071G 59G301 | CHIP BEAD 300OHM | |
| FB105 | 071G 59G301 | CHIP BEAD 300OHM | |
| FB107 | 071G 59G301 | CHIP BEAD 300OHM | |
| FB108 | 071G 59G301 | CHIP BEAD 300OHM | |
| FB703 | 071G 59G301 | CHIP BEAD 300OHM | |
| FB103 | 071G 59K190 B | 19 OHM BEAD | |
| FB101 | 071G 59K190 B | 19 OHM BEAD | |
| FB102 | 071G 59K190 B | 19 OHM BEAD | |
| D702 | 093G 60505 | DIO SIG SM BAT54C(PHSE)R | |
| D109 | 093G 60505 | DIO SIG SM BAT54C(PHSE)R | |
| D104 | 093G 60505 | DIO SIG SM BAT54C(PHSE)R | |

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|---|---|---|---|
| D108 | 093G 60505 | DIO SIG SM BAT54C(PHSE)R | |
| ZD105 | 093G 39GA01 T | RLZ5.6B | |
| ZD104 | 093G 39GA01 T | RLZ5.6B | |
| D701 | 093G3004 3 | SM340A | |
| | 715G2883 1 | MAIN PCB FR-4 D/S 67X80MM | |
| | KEPC7AC3 | KEY G2836-D-X-X-3-080201 | |
| CN001 | 033G3802 6H | WAFER 6P RIGHT ANGLE PITCH 2.0 | |
| SW006 | 077G 600 1GCJ | TACT SWITCH TSPB-2 -NP | |
| SW001 | 077G 600 1GCJ | TACT SWITCH TSPB-2 -NP | |
| SW002 | 077G 600 1GCJ | TACT SWITCH TSPB-2 -NP | |
| SW004 | 077G 600 1GCJ | TACT SWITCH TSPB-2 -NP | |
| SW003 | 077G 600 1GCJ | TACT SWITCH TSPB-2 -NP | |
| SW005 | 077G 600 1GCJ | TACT SWITCH TSPB-2 -NP | |
| LED001 | 081G 121HT GP | LED 3PIN 3Φ 黄绿 GP32032M/G307-ZY-50D | |
| R006 | 061G0603000 | RST CHIPR 0 OHM +-5% 1/10W | |
| R003 | 061G0603000 | RST CHIPR 0 OHM +-5% 1/10W | |
| R005 | 061G0603102 | RST CHIPR 1K OHM +-5% 1/10W | |
| R004 | 061G0603202 | RST CHIPR 2 KOHM +-5% 1/10W | |
| R002 | 061G0603202 | RST CHIPR 2 KOHM +-5% 1/10W | |
| J002 | 061G1206000 | RST CHIPR 0 OHM +-5% 1/4W | |
| J001 | 061G1206000 | RST CHIPR 0 OHM +-5% 1/4W | |
| C004 | 065G0603151 32 | CHIP 150PF 50V X7R | |
| C005 | 065G0603151 32 | CHIP 150PF 50V X7R | |
| C011 | 065G0603151 32 | CHIP 150PF 50V X7R | |
| C001 | 065G0603151 32 | CHIP 150PF 50V X7R | |
| C003 | 065G0603151 32 | CHIP 150PF 50V X7R | |
| | 715G2836 1 | KEPC PCB FR1 127x17x1.6mm SS | |
| | PWPC8C42MQE9 | POWER G2824-1-2-X-27-080530 | |
| | 040G 45762412B | CBPC LABEL | |
| CN801 | 033G8021 2E F | WAFER | |
| CN802 | 033G8021 2E F | WAFER | |
| CN803 | 033G8021 2E F | WAFER | |
| CN804 | 033G8021 2E F | WAFER | |
| CN801 | 033G8021 2E U | INVERT CONNECTOR | |
| CN802 | 033G8021 2E U | INVERT CONNECTOR | |
| CN803 | 033G8021 2E U | INVERT CONNECTOR | |
| CN804 | 033G8021 2E U | INVERT CONNECTOR | |
| IC903 | 056G 139 3A | IC PC123Y22FZ0F | |
| NR901 | 061G 58100 W | RST NTCR 10 OHM +-20% 5A THINKING | |
| C903 | 063G 107474 U | MPX-474K27B15L3 | |

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|---|---|---|---|
| C903 | 063G107K474 TS | CAP X2 0.47UF K 275VAC | |
| C801 | 065G 3J1806ET | 18PF 5% SL3KV TDK | |
| C812 | 065G 3J1806ET | 18PF 5% SL3KV TDK | |
| C825 | 065G 3J1806ET | 18PF 5% SL3KV TDK | |
| C826 | 065G 3J1806ET | 18PF 5% SL3KV TDK | |
| C902 | 065G305M1022BP | Y2 1000PF M 250VAC Y5P | |
| C901 | 065G305M1022BP | Y2 1000PF M 250VAC Y5P | |
| C900 | 065G306M3322BP | 3300PF 20% | |
| C905 | 067G 31512115K | EC 120uF 450V 20*40mm | |
| C811 | 067G215D4714KV | E.C 105℃ CAP 470UF M 25V ED SERIES | |
| C805 | 067G215D4714KV | E.C 105℃ CAP 470UF M 25V ED SERIES | |
| C918 | 067G215D6814KV | CAP 105℃ 680uF M 25V | |
| C917 | 067G215D6814KV | CAP 105℃ 680uF M 25V | |
| C939 | 067G215S1024KV | EC 105℃ CAP 1000UF M 25V | |
| C915 | 067G215S4713KV | EC 105℃ CAP 470UF M 16V | |
| L904 | 073G 253 91 H | CHOKE COIL | |
| L903 | 073G 253 91 H | CHOKE COIL | |
| L904 | 073G 253 91 L | CHOKE BY LI TA | |
| L903 | 073G 253 91 L | CHOKE BY LI TA | |
| L901 | 073L 174 40 HG | GBQM4.778.391 | |
| T802 | 080GL20T510 DN | X'FMR INVERTER 142uH | |
| T801 | 080GL20T510 DN | X'FMR INVERTER 142uH | |
| T901 | 080GL22T 3 N | X'FMR 510uH YUVA-822 | |
| CN901 | 087G 50132A DL | AC SOCKET 3PIN | |
| BD901A | 093G 50460 28 | BRIDGE DIODE KBP208G LITEON | |
| D907 | 093G3006 1 1 | 31DQ06FC3 NIHON INTER | |
| CN902 | 095G 820 7E502 | WIRE HARNESS 7P(SAN)-9P(PH) | 2nd source |
| CN902 | 095G 820 7W502 | WIRE HARNESS 7P(SAN)-9P(PH) | |
| C908 | 096G 29 8 | TUBE | |
| | 705GQ793078 | D906 ASS'Y | |
| D906 | 093G 60238 | FCH10A15 | |
| | 0M1G1730 8120 | SCREW | |
| HS3 | Q90G6263 6 | HEAT SINK | |
| | 705GQ857012 | Q901 ASS'Y | |
| Q901 | 057G 667 21 | STP10NK70ZFP | |
| | AM1G1730 8120 | SCREW | |
| HS5 | Q90G6263 6 | HEAT SINK | |
| U801 | 056G 379 22 | IC TL494IDR SOIC-16 | |
| U901 | 056G 379 98 | IC LD7552DPS SOP-8 | |
| Q903 | 057G 417 4 | PMBS3904/PHILIPS-SMT(04) | |

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|---|---|---|---|
| Q811 | 057G 417 4 | PMBS3904/PHILIPS-SMT(04) | |
| Q810 | 057G 417 4 | PMBS3904/PHILIPS-SMT(04) | |
| Q807 | 057G 417 4 | PMBS3904/PHILIPS-SMT(04) | |
| Q803 | 057G 417 4 | PMBS3904/PHILIPS-SMT(04) | |
| Q805 | 057G 417 6 | PMBS3906/PHILIPS-SMT(06) | |
| Q806 | 057G 417 6 | PMBS3906/PHILIPS-SMT(06) | |
| Q808 | 057G 759 2 | RK7002 | |
| Q801 | 057G 760 4B | PDTA144WK SOT346 | |
| Q802 | 057G 760 5B | PDTC144WK SOT346 | |
| Q809 | 057G 763 6 | AO4828L | |
| Q804 | 057G 763 6 | AO4828L | |
| Q804 | 057G 763 14 | AM9945N | |
| Q809 | 057G 763 14 | AM9945N | |
| R827 | 061G0603100 1F | RST CHIPR 1 KOHM +-1% 1/10W | |
| R848 | 061G0603100 1F | RST CHIPR 1 KOHM +-1% 1/10W | |
| R849 | 061G0603100 1F | RST CHIPR 1 KOHM +-1% 1/10W | |
| R926 | 061G0603100 1F | RST CHIPR 1 KOHM +-1% 1/10W | |
| R942 | 061G0603100 1F | RST CHIPR 1 KOHM +-1% 1/10W | |
| R808 | 061G0603100 2F | RST CHIPR 10K OHM +-1% 1/10W | |
| R819 | 061G0603100 2F | RST CHIPR 10K OHM +-1% 1/10W | |
| R824 | 061G0603100 2F | RST CHIPR 10K OHM +-1% 1/10W | |
| R831 | 061G0603100 2F | RST CHIPR 10K OHM +-1% 1/10W | |
| R833 | 061G0603100 2F | RST CHIPR 10K OHM +-1% 1/10W | |
| R838 | 061G0603100 2F | RST CHIPR 10K OHM +-1% 1/10W | |
| R840 | 061G0603100 2F | RST CHIPR 10K OHM +-1% 1/10W | |
| R852 | 061G0603100 2F | RST CHIPR 10K OHM +-1% 1/10W | |
| R853 | 061G0603100 2F | RST CHIPR 10K OHM +-1% 1/10W | |
| R813 | 061G0603101 | RST CHIPR 100 OHM +-5% 1/10W | |
| R823 | 061G0603103 | RST CHIPR 10 KOHM +-5% 1/10W | |
| R809 | 061G0603105 | RST CHIPR 1M OHM +-5% 1/10W | |
| R817 | 061G0603105 | RST CHIPR 1M OHM +-5% 1/10W | |
| R821 | 061G0603105 | RST CHIPR 1M OHM +-5% 1/10W | |
| R836 | 061G0603105 | RST CHIPR 1M OHM +-5% 1/10W | |
| R818 | 061G0603205 | RST CHIPR 2 MOHM +-5% 1/10W | |
| R844 | 061G0603220 | RST CHIPR 22 OHM +-5% 1/10W | |
| R847 | 061G0603220 | RST CHIPR 22 OHM +-5% 1/10W | |
| R930 | 061G0603243 1F | RST CHIPR 2.43K OHM +-1% 1/10W | |
| R927 | 061G0603243 1F | RST CHIPR 2.43K OHM +-1% 1/10W | |
| R815 | 061G0603270 2F | RST CHIPR 27 KOHM +-1% 1/10W | |
| R828 | 061G0603470 2F | RST CHIPR 47 KOHM +-1% 1/10W | |

| R842 | 061G0603470 2F | RST CHIPR 47 KOHM +-1% 1/10W | |
|---|---|---|---|
| R822 | 061G0603473 | RST CHIPR 47 KOHM +-5% 1/10W | |
| R820 | 061G0603564 | RST CHIPR 560 KOHM +-5% 1/10W | |
| R845 | 061G0603680 | RST CHIPR 68 OHM +-5% 1/10W | |
| R846 | 061G0603680 | RST CHIPR 68 OHM +-5% 1/10W | |
| R829 | 061G0603680 2F | RST CHIPR 68K OHM +-1% 1/10W | |
| R816 | 061G0603680 2F | RST CHIPR 68K OHM +-1% 1/10W | |
| R814 | 061G0603750 2F | RST CHIPR 75KOHM +-1% 1/10W | |
| R804 | 061G0805000 | RST CHIPR 0 OHM +-5% 1/8W | |
| R801 | 061G0805000 | RST CHIPR 0 OHM +-5% 1/8W | |
| R832 | 061G0805000 | RST CHIPR 0 OHM +-5% 1/8W | |
| R830 | 061G0805000 | RST CHIPR 0 OHM +-5% 1/8W | |
| R806 | 061G0805100 1F | RST CHIPR 1K OHM +-1% 1/8W | |
| R807 | 061G0805100 1F | RST CHIPR 1K OHM +-1% 1/8W | |
| R834 | 061G0805100 1F | RST CHIPR 1K OHM +-1% 1/8W | |
| R835 | 061G0805100 1F | RST CHIPR 1K OHM +-1% 1/8W | |
| R843 | 061G0805100 4F | RST CHIPR 1 MOHM +-1% 1/8W | |
| R802 | 061G0805101 | 1ST CHIPR 100 OHM +-5% 1/8W | |
| R925 | 061G0805102 | RST CHIPR 1K OHM +-5% 1/8W | |
| R939 | 061G0805102 | RST CHIPR 1K OHM +-5% 1/8W | |
| R938 | 061G0805103 | RST CHIPR 10K OHM +-5% 1/8W | |
| R841 | 061G0805150 1F | RST CHIPR 1.5 KOHM +-1% 1/8W | |
| R839 | 061G0805150 1F | RST CHIPR 1.5 KOHM +-1% 1/8W | |
| R812 | 061G0805150 1F | RST CHIPR 1.5 KOHM +-1% 1/8W | |
| R811 | 061G0805150 1F | RST CHIPR 1.5 KOHM +-1% 1/8W | |
| R924 | 061G0805151 | RST CHIPR 150 OHM +-5% 1/8W | |
| R826 | 061G0805221 3F | RST CHIPR 221 KOHM 1/8W +-5% | |
| R943 | 061G0805471 | RST CHIPR 470 OHM +-5% 1/8W | |
| R825 | 061G0805510 2F | RST CHIPR 51K OHM +-1% 1/8W | |
| RJ801 | 061G1206000 | RST CHIPR 0 OHM +-5% 1/4W | |
| RJ802 | 061G1206000 | RST CHIPR 0 OHM +-5% 1/4W | |
| RJ803 | 061G1206000 | RST CHIPR 0 OHM +-5% 1/4W | |
| RJ804 | 061G1206000 | RST CHIPR 0 OHM +-5% 1/4W | |
| RJ805 | 061G1206000 | RST CHIPR 0 OHM +-5% 1/4W | |
| RJ806 | 061G1206000 | RST CHIPR 0 OHM +-5% 1/4W | |
| RJ807 | 061G1206000 | RST CHIPR 0 OHM +-5% 1/4W | |
| RJ808 | 061G1206000 | RST CHIPR 0 OHM +-5% 1/4W | |
| RJ809 | 061G1206000 | RST CHIPR 0 OHM +-5% 1/4W | |
| RJ810 | 061G1206000 | RST CHIPR 0 OHM +-5% 1/4W | |
| RJ901 | 061G1206000 | RST CHIPR 0 OHM +-5% 1/4W | |

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|---|---|---|---|
| R910 | 061G1206100 | RST CHIPR 10 OHM +-5% 1/4W | |
| R962 | 061G1206101 | RST CHIPR 100 OHM +-5% 1/4W | |
| R961 | 061G1206101 | RST CHIPR 100 OHM +-5% 1/4W | |
| R935 | 061G1206101 | RST CHIPR 100 OHM +-5% 1/4W | |
| R920 | 061G1206101 | RST CHIPR 100 OHM +-5% 1/4W | |
| R919 | 061G1206101 | RST CHIPR 100 OHM +-5% 1/4W | |
| R918 | 061G1206101 | RST CHIPR 100 OHM +-5% 1/4W | |
| R901 | 061G1206105 | 1M 1206 | |
| R902 | 061G1206105 | 1M 1206 | |
| R810 | 061G1206150 | RST CHIPR 15 OHM +-5% 1/4W | |
| R837 | 061G1206150 | RST CHIPR 15 OHM +-5% 1/4W | |
| R850 | 061G1206150 | RST CHIPR 15 OHM +-5% 1/4W | |
| R851 | 061G1206150 | RST CHIPR 15 OHM +-5% 1/4W | |
| R912 | 061G1206221 | RST CHIPR 220 OHM +-5% 1/4W | |
| R904 | 061G1206304 | RST CHIPR 300k OHM +-5% 1/4W | |
| R905 | 061G1206304 | RST CHIPR 300k OHM +-5% 1/4W | |
| R906 | 061G1206304 | RST CHIPR 300k OHM +-5% 1/4W | |
| R909 | 061G1206519 | RST CHIPR 5.1 OHM +-5% 1/4W | |
| C932 | 065G0603102 32 | 1000PF +-10% 50V X7R | |
| C804 | 065G0603104 12 | CER2 0603 X7R 16V 100N P | |
| C807 | 065G0603104 12 | CER2 0603 X7R 16V 100N P | |
| C814 | 065G0603104 12 | CER2 0603 X7R 16V 100N P | |
| C810 | 065G0603104 22 | CAP CHIP 0603 0.1UF K 25V X7R | |
| C802 | 065G0603105 12 | CHIP 1UF 16VX7R 0603 | |
| C806 | 065G0603105 12 | CHIP 1UF 16VX7R 0603 | |
| C819 | 065G0603105 12 | CHIP 1UF 16VX7R 0603 | |
| C820 | 065G0603105 12 | CHIP 1UF 16VX7R 0603 | |
| C818 | 065G0603222 22 | CHIP 2200PF 25V X7R | |
| C817 | 065G0603222 22 | CHIP 2200PF 25V X7R | |
| C815 | 065G0603222 22 | CHIP 2200PF 25V X7R | |
| C813 | 065G0603222 22 | CHIP 2200PF 25V X7R | |
| C928 | 065G0805102 31 | CAP CHIP 0805 1000PF J 50V NPO | |
| C824 | 065G0805104 22 | 0.1UF +-10% 25V X7R 080 | |
| C823 | 065G0805104 22 | 0.1UF +-10% 25V X7R 080 | |
| C931 | 065G0805104 32 | CAP CHIP 0805 0.1uF K 50V X7R | |
| C924 | 065G0805104 32 | CAP CHIP 0805 0.1uF K 50V X7R | |
| C907 | 065G0805104 32 | CAP CHIP 0805 0.1uF K 50V X7R | |
| C828 | 065G0805152 32 | CHIP 1500PF 50V X7R 0805 | |
| C827 | 065G0805152 32 | CHIP 1500PF 50V X7R 0805 | |
| C822 | 065G0805152 32 | CHIP 1500PF 50V X7R 0805 | |

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|---|---|---|---|
| C821 | 065G0805152 32 | CHIP 1500PF 50V X7R 0805 | |
| C816 | 065G0805152 32 | CHIP 1500PF 50V X7R 0805 | |
| C803 | 065G0805152 32 | CHIP 1500PF 50V X7R 0805 | |
| C809 | 065G0805221 31 | CAP CHIP 0805 220PF J 50V NPO | |
| C808 | 065G0805225 12 | CAP CHIP 0805 2.2UF K 16V X7R | |
| C909 | 065G0805471 21 | CAP CHIP 0805 470PF J 25V NPO | |
| C910 | 065G0805473 32 | CHIP 0.047UF 50V X7R | |
| C929 | 065G1206102 72 | CAP CHIP 1206 1000PF K 500V X7R | |
| C912 | 065G1206102 72 | CAP CHIP 1206 1000PF K 500V X7R | |
| FB902 | 071G 57G800 B | CHIP BEAD HCB3216KF-800T30 bullwill | |
| D801 | 093G 64 33 | DIO SIG SM BAV99 (PHSE)R | |
| D802 | 093G 64 33 | DIO SIG SM BAV99 (PHSE)R | |
| D809 | 093G 64 33 | DIO SIG SM BAV99 (PHSE)R | |
| D810 | 093G 64 33 | DIO SIG SM BAV99 (PHSE)R | |
| D806 | 093G 64 38 D | DIODE BAW56 DIODES | |
| D808 | 093G 64 38 D | DIODE BAW56 DIODES | |
| ZD921 | 093G 39S 12 T | RLZ20B LLDS | |
| ZD922 | 093G 39S 24 T | RLZ 5.6B LLDS | |
| ZD902 | 093G 39S 44 T | RLZ18B LLDS | |
| D903 | 093G 64S511SEM | IN4148W | |
| D812 | 093G 64S511SEM | IN4148W | |
| D811 | 093G 64S511SEM | IN4148W | |
| D803 | 093G 64S511SEM | IN4148W | |
| D807 | 093G 64S511SEM | IN4148W | |
| CN901 | 006G 31500 | EYELET | |
| T901 | 006G 31502 | 1.5MM RIVET | |
| IC904 | 056G 158 12 | KIA431A-AT/P TO-92 | |
| IC904 | 056G 158504AME | IC AME431BAJATB25Z AME | |
| R903 | 061G152M10452T | RST MOFR 100KOHM +-5% 2WS | |
| R946 | 061G152M15152T | RST MOFR 150 OHM +-5% 2WS | |
| R914 | 061G152M39852T | RST MOFR 0.39 OHM +-5% 2WS | |
| C906 | 065G 2K152 1T6213 | CAP CER 1500PF K 2KV | |
| C908 | 067G215Y2207KT | CAP 105℃ 22UF M 50V KINGNICHI | |
| FB904 | 071G 55 29 | FERRITE BEAD | |
| FB903 | 071G 55 29 | FERRITE BEAD | |
| F903 | 084G 56 3 B | FUSE 3.15A 250V | |
| F901 | 084G 56 3 B | FUSE 3.15A 250V | |
| D900 | 093G 6026T52T | RECTIFIER DIODE FR107 | |
| D901 | 093G 6038T52T | FR103 | |
| D900 | 093G1100 1152T | DIODE PR1007R 1A/1000V DO-41 | |

| | 715G2824 1 2 | POWER-PCB,FR-1,94V-0,T1.6MM,160*160MM | |
|---|---|---|---|
| L904 | S73G25391V | CHOKE COIL ASS'Y | |
| | Q33G0171 1 1C0100 | LENS | |
| | Q40G 22N972 8A | RATING LABEL | |
| | Q40G0002972 1C | Box Sealing label | |
| | Q40G000297212A | Energy star label black | |
| | Q40G000297219A | POP LABEL FOR TGL2240A | |
| | Q44GC034101 | EPS(L) | |
| | Q44GC034201 | EPS(R) | |
| | Q44GC034972 2A | 22 LCD CARTON | |
| | Q45G 77 5 | PE PACKING | |
| | Q45G 88606 R | PE BAG FOR BASE | |
| | Q45G 88609 74 R | epe bag for monitor | |
| | Q52G6020 29 | PROTECT FILM | |
| | Q41G2201972 7A | manual | |
| | Q45G 76 28 RN R | PE BAG MANUAL | |
| | 040G 58162435A | P/N LABEL FOR MANUAL PE BAG | |
| | Q40G0001972 1A | Carton label | |